CONSTRUCTION NEWS

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RAILWAYS.

*(*Denotes that this work is advertised in Engineering News.)*

Massachusetts.—New York, New Haven & Hartford R. R.—The State Railroad Commissioners have recommended that this company prepare plans for a comprehensive development of transportation facilities in New Bedford. A small station is also recommended at Weld St. in the northern part of the city. The new development will be planned to coordinate with the proposed through line from Fall River to Cape Cod.

Connecticut.—New York, New Haven & Hartford R. R.—Plans have been approved by the State R. R. Commissioners for the revision of grades, and alignment on the air line. With the improvements about 23 grade crossings will be eliminated. Noted May 1.

Maryland.—Baltimore & Virginia R. R.—A proposition has been made to bond Anne Arundel County to the extent of $150,000 and Calvert County to $200,000, to aid in the building of this road. The entire road will not be over 90 miles. Noted June 8.

Virginia. — Richmond & Northern Neck R. R.—We are officially advised that the preliminary survey has been begun of this proposed road, a line running from a connection with the Chesapeake & Ohio Ry. and the Richmond, Fredricksburg & Potomac Ry., at Doswell, Va., through the Counties of King and Queen, King William and Essex to Tappahannock on the Rappahannock River, thence across the river through the Counties of Richmond, Westmoreland, Lancaster and Northumberland in a southeasterly direction to a point on the Great Wicomico River near the Chesapeake Bay. The road will be about 85 miles long, with branches. Channing M. Ward, Tappahannock, Va., is Ch. Engr. He will have full charge of the purchase of all construction material, as well as equipment.

West Virginia. — Twin Mountain & Potomac Ry.—A road is projected from Keyser to Twin Mountain by the way of Arnolds Gap and Burlington. The grades are easy and the total length is about 26 miles. J. C. Lewis, Jackson, W. Va., is Ch. Engr.

South Carolina.—North & South Carolina Ry.—This company has decided, it is reported, to build a line from Mullun to the Pee Dee River in Marion County. W. R. Bonsal, Hamlet, N. C., is Pres.

Florida. — Atlantic, Okeechobee & Gulf Ry.—This company has made application for an entrance to Tampa. Henry Clay Ferriot, New Orleans, La., is Pres. Noted March 30.

Louisiana.—Iberia, St. Mary & Eastern R. R.—This company is planning to construct a line from New Iberia to Berwick. F. M. Welch, New Iberia, La., is Pres.

Wisconsin.—Dunbar & Wausaukee Ry.—This company has been granted a charter to build and operate a railway from Wausaukee to Girard Junction, 14 miles, and an extension to Dunbar, 12 miles, all in Marinette County, Wis. It will be a standard gage railway. J. W. Wells, Menominee, Mich., $43,350; Charles B. Culbertson, Detroit, Mich., and James A. Culbertson, Kenilworth, Ill., are incorporators.

Kansas.—Missouri, Kansas & Texas R. R.—Preliminary surveys have been made for a line from Parsons to Wichita, about 110 miles. This line will pass through Howard, Latham, Douglass and Rose Hill. The company will make many improvements on its Parson to Junction City line, including grade revision and reduction of curvature. A bond issue of $107,090,000 has recently been floated. A. M. Acheson, Dallas, Tex., is Acting Ch. Engr.

+*Texas.—El Paso & Southwestern R. R.—The contract for the extension of this railroad from Fairbanks to Tucson, Ariz., about 65 miles, has been awarded to MACARTHUR BROS. CO., 11 Pine St., New York. The work averages 40,000 cu. yds. to the mile and there is approximately 30,000 cu. yds. of concrete. A local office of the contractor has been established at Benson, Ariz., in charge of F. C. Hitchcock, Vice-Pres. and Gen. Mgr., who will sublet work. Noted June 29.

Oklahoma.—Missouri, Oklahoma & Gulf Ry.—An extension to Oklahoma City is contemplated; but whether this will go from Henryetta or Muskogee will be determined later. The line from Henryetta would be about 80 miles, while the other would be about 120 miles. The line from Henryetta is the more probable. The company also contemplates building a line into the undeveloped "No Man's Land," or Beaver, Texas and Cimarron Counties. J. J. Harrison, Muskogee, is Ch. Engr.

+Colorado.—Laramie, Hahn's Peak & Pacific R. R.—Contracts have been let to P. J. CAIN, Steamboat Springs, Colo., for grading from Cowdry to Walden and Hebron. R. D. Stewart, Laramie, Wyo., is Ch. Engr.

Nevada.—Southern Pacific Co.—This company is considering a cutoff extending through the Wonder and Boyer Camps in Nevada and across the famous Osopp Valley salt fields. This line will extend from Battle Mountain to Hazen, and will cut out the curve at the Humboldt River, saving 49.3 miles across the State of Nevada.

Arizona.—Navajo Southern.—This recently incorporated company proposes to build a line from Holbrook to the south line of Navajo County. F. H. Brown is Pres. and W. H. Clark, Secy., both of Phoenix.

+California.—San Diego & Arizona Ry.—Contracts have been awarded to ROBERT SCHERER & CO., Los Angeles, Cal., for construction of the line from New River. E. J. Kallright, San Diego, Cal., is Ch. Engr.

California.—Santa Maria Valley R. R. —This company has recently been incorporated to build a railway from the oil fields in Cat Canyon to Betteravia, about 28 miles. Hugh McKenney and W. L. Schoenthal, Santa Barbara, are interested.

California. — Southern Pacific Co. — The Colusa & Hamilton R. R. has been incorporated to build a 60-mile line from Harrington to Hamilton.

New Brunswick.—St. John & Quebec Ry.—A new line will be built by this company, which is a subsidiary of the Aroostook Valley, from St. John, N. B., to Grand Falls, by way of Fredericton, Woodstock, Centerville and Andover. At Grand Falls connection will be made with the Grand Trunk Pacific. The line will be 210 miles long. It will be operated by the Intercolonial. A. R. Gould, Presque Isle, Me., is Pres., both of the St. John & Quebec and the Aroostook Valley. Noted April 27.

+Ontario.—Algoma Central & Hudson Bay R. R. — Contracts have been awarded to J. D. McARTHUR and T. J. KENNEDY, Winnipeg, Man., for the completion of this line. This includes grading and ballasting 208 miles of line. The contract price is about $3,000,000. Noted June 29.

ELECTRICAL RAILWAYS.

(+Denotes a contract awarded.)

Attleboro, Mass.—The Interstate Consolidated St. Ry. Co. has received permission from the Bd. of Ry. Comrs. to rebuild its tracks in South Main St. H. C. Page, Worcester, is Gen. Mgr.

Pittsfield, Mass. — The Berkshire Street Ry. Co. has a project on foot to double track a part of its line and build an extension. C. Q. Richmond, Pittsfield, is Gen. Mgr.

Stafford Springs, Conn.—The Tolland County Street Ry. Co. has organized and is planning to build a railway between Stafford Springs and Staffordville. A charter was granted several years ago when the company was first formed. The directors are A. S. May, B. I. Spockland and N. S. Buckingham.

Corning, N. Y.—The Corning, Keuka Lake & Ontario Ry. Co. has made application to the Public Service Comn., Second District, for permission to build a railway from Corning, Steuben County, to Sodus, Wayne County, about 90 miles.

Rome, N. Y.—The Utica & Mohawk Valley Ry. Co. has been granted a franchise to extend its track on East and West Dominick Sts. and to enter the city by way of Mill and Dominick Sts. W. J. Harris, Utica, is Ch. Engr.

Watertown, N. Y.—The Black River Traction Co. will double track its Court St. line and place heavier rails on its State St. line, it is stated. D. M. Cosgrove, this city, is Secy.

+Trenton, N. J.—A contract for reconstructing tracks over State St., from the canal bridge to Broad St., for Trenton Mercer County Traction Co., has been awarded to RICHARD NEWTON.

Washington, D. C. — An application has been made by the Baltimore & Washington Transit Co., asking permission to issue $50,000 bonds, to be used to build an extension to Sandy Spring, Md., about 14 miles.

The Washington-Virginia Ry. Co. is reported to have leased the Bluemont branch of the Southern Ry. Co. for a term of 99 years, and is planning to equip it with electricity.

Morgantown, W. Va.—Bids will soon be asked for by President Garlow, it is stated, for the construction of the Mount Morris-Maidesville railway. A cut of 30 ft. will be necessitated. Most of the right of way has been secured and $60,000 has been subscribed. The committee is composed of Mayor Donley, attorney for the company; Aaron J. Garlow, Pres., and Dr. I. C. White.

Millen, Ga.—Application has been made by the Millen & Newington R. R. Co. for a charter to build a 25-mile railway between Millen and Newington. E. S. Lane, H. S. McCall, W. H. Marsh, W. M. Parker, D. H. Blackburn, J. T. Walker, J. H. Evans, Jr., W R. Turner, R. G. Daniels and A. S. Anderson are the incorporators.

New Orleans, La.—The Algiers Ry. & Light Co. has received a franchise to extend its tracks over certain streets. O. U. Vernuille, 222 Elmira Ave., is Ch. Engr.

Columbus, Ohio.—The Cleveland & Youngstown R. R. Co. has been incorporated at Youngstown, Ohio, to build and operate a line between Cleveland and Youngstown. The incorporators are: James P. Wilson, Fred J. Heim, Theodore A. Johnson, John T. Harrington and Thomas A. Jacobs.

Marquette, Mich.—The Houghton County Traction Co. has been granted a franchise to build an extension on Ingot St. to the railroad crossing. Gardner Rogers, Hancock, is Mgr.

Perry, Iowa.—B. C. Dillenbeck, this city, contemplates building a railway. It is stated that a franchise has been granted.

Duluth, Minn.—The Suburban Traction Co. will soon award a contract to build a 7-mile electric railway over various streets in Duluth. N. J. Upham, Duluth, is reported interested.

Leavenworth, Kan.—D. A. McKibben, this city, and W. B. Walker, Excelsior Springs, Mo., are organizing a company to build a railway from Leavenworth to Excelsior Springs, about 40 miles, and will pass through Beverly, Platte City and Liberty, Mo. A power plant will be located in Leavenworth and will also supply electricity for lamps and motors. The company is to be known as the Leavenworth & Excelsior Springs Ry. & Power Co., and will be capitalized at $2,000,000.

Columbia Falls, Mont.—The Columbia Falls & Southern R. R. Co. has been incorporated for the purpose of building a 26-mile railway connecting Columbia Falls, Jessup and Big Fork. The officers are: A. L. Jordan, Columbia, Pres.; W. P. Snow, Big Fork, Secy.; John T. Robinson, Columbia Falls, Treas., and H. E. Waggener, Columbia Falls, Ch. Engr.

St. Louis, Mo.—The Board of Education is making estimates on the work of combining heating plants of school buildings wherever it is possible. The Committee on School Buildings has received bids on the work of making underground connections between Soldan High and Clark schools, on Union Ave., and Central High School and Crow schools, at Grand Ave. and School St. The lowest bid was by the Peters-Eichler Heating Co., and was $11,577 for both contracts.

San Antonio, Tex.—An interurban electric line from San Antonio to the Pearson Dam Project on the Medina River, is being planned. V. A. Raggio, Dallas, representative of the General Electric Co., and Dr. F. S. Pearson are interested.

Florence, Colo.—Right of way and franchises have been secured and construction will probably begin soon on a 6-mile railway to connect Florence, Williamsburg, Rockvale and Coal Creek. D. F. Foor, this city, is a promoter.

Roslyn, Wash.—The Kittitas Ry. & Power Co. contemplates building an electric railway connecting Roslyn, Ronald, Janesville and Cle Elum. Paul L. Richards, Tacoma, is Pres.

Wenatchee, Wash. — The Wenatchee Valley Ry. & Power Co. has under consideration the construction of a railway about 20 miles in length, connecting Wenatchee and Leavenworth. E. J. Felt, Tacoma, is interested.

Chico, Cal. — The Northern Electric R. R. Co. has acquired from the Diamond Match Co. all its railway franchises and rights on Ninth St., allowing the road to form a connection with the main line of the Southern Pacific. Noted June 8.

Santa Rosa, Cal.—Construction work will begin soon on the Santa Rosa-Clear Lake R. R., to extend from Santa Rosa to Lakeport and other points in Clear Lake County. J. W. Barrows, Roadmaster of the Western Pacific at Honcut, will be Superintendent of Construction.

Sacramento, Cal.—Application for a charter has been made by the Sacramento & Woodland Ry. Co., which is a subsidiary company of the Vallejo & Northern Ry., to build a railway between Sacramento and Woodland, connecting at Woodland with the Vallejo & Northern Ry. T. T. C. Gregory is Pres.

San Bernardino, Cal.—The Board of Supervisors has awarded a franchise to the Nevada Power Co. for a line to be constructed through California County.

Turlock, Cal.—The Tidewater & Southern Ry. Co. has received a franchise to build an electric railway between Stockton and Turlock.

Brantford, Ont. — Bids for the construction of about 30 miles of railroad will not be asked for by the Lake Erie & Northern Ry. Co. until some time in October. William P. Kellett is Ch. Engr.

San Luis Potosi, Mex.—An English syndicate, headed by Dr. F. S. Pearson, of New York, has purchased the local street railway system, and it is announced that the new owners will spend more than $1,000,000 in transforming all of the lines into electric transit and making extensions. One of the first extensions to be constructed will be an interurban line to Soledad. The Mexican Central Light & Power Co. will provide the electrical energy for operating this system.

LIGHT AND POWER PLANTS.

*(*Denotes that this work is advertised in Engineering News.)*

+Fort Ethan Allen, Vt.—A contract for the construction of an addition to the pump house, installing machinery and remodeling the electric lighting system has been awarded to L. B. JACOBS, Newark, Del., at $18,396.

Boston, Mass.—Bids will be received by R. C. Hollyday, Chn. Engr. Bureau of Yards and Docks, Navy Dept., Washington, D. C., until Aug. 19, for six switchboard feeder panels, Specification No. 1807. An appropriation of $4,-750 has been made.

+Fall River, Mass.—A contract has been awarded to the GENERAL ELECTRIC CO., Schenectady, N. Y., for the installation of an electric plant for the Pilgrim Mills.

Newport, R. I.—Bids will be received at the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., until Aug. 15 for fire alarm system, Schedule 3,779.

+Auburn, N. Y.—A contract for constructing the subway on State and Seymour Sts. has been awarded to BRAYER BROS. The subway will consist of 25,200 duct ft. 12-way tile, 5,400 duct ft. 6-way tile, 6,000 lin. ft. straight iron pipe, 9 double and 1 single manholes.

Buffalo, N. Y.—A contract for the construction of a power plant for the Mother House of the Sisters of Mercy, at Abbott Road and Red Jacket Parkway, has been awarded to MOSIER & SUMMERS, 1266 Seneca St., at $10,000.

+Central Islip, N. Y.—A contract for engine, dynamo, etc., for the North Colony power house, bids for which were opened May 10, has been awarded to the COMMERCIAL CONSTRUCTION CO., New York, N. Y., at $6,463. K. McGarr is Secy.

New York, N. Y.—Bids will be received by Henry S. Thompson, Comr., Dept. of Water Supply, Gas and Electricity, Room 1904, 13 Park Row, until Aug. 11 for furnishing and delivering 1,000 cast-iron lamp posts and parts thereof.

Bids will be received by Arthur J. O'Keeffe, Comr. Dept. of Bridges, 13 Park Row, until 2 p. m., Aug. 10, for furnishing and erecting one duplex, two-stage, motor-driven air compressor at the Williamsburgn Bridge.

***New York, N. Y.**—Bids will be received at the office of James Knox Taylor, Superv. Arch., Washington, D. C., until 3 p. m., Aug. 25, for the installation of a conduit and wiring system for light and power and conduits for standard clock, telephone, bell, vault protection, fire alarm and telegraph systems in the New U. S. Post Office at New York, N. Y. Specifications may be had at the office of the Supervising Architect or at the office of the Archs., McKim, Mead and White, 160 Fifth Ave., New York.

New York, N. Y.—Bids will be received by Patrick A. Whitney, Comr., Dept. of Correction, 148 E. 20th St., until 11 a. m., on Aug. 10, for laying an electric feeder system, including covers for manholes, for the lighting and power service, and a feeder and subsidiary systems for the street lighting, etc., on Harts Island, New York. Bids will be compared and the contract awarded at a lump or aggregate sum. Further information may be obtained at the office of the Department of Correction.

+Newark, N. J.—A contract for equipment of an electric light and power plant has been awarded to GEO. W. FOWLER & CO., Engrs., New York, N. Y., by W. V. Snyder Co.

Chambersburg, Pa.—A plan to improve and install new machinery at the municipal electric-light plant is under consideration.

Philadelphia, Pa. — The following bids were received by the supervising architect, Treasury Dept., Washington,

D. C., on July 15 for conduit and wiring system, lighting fixtures in the U. S. appraisers stores: Keller Pipe Co., Philadelphia, Pa., $4,280; The Whitall Electric Co., Westerly, R. I., $6,131; Strang Electric Co., Philadelphia, Pa., $5,473; Albert Gentel, Philadelphia, Pa., $6,649.

+Aspinwall, Pa.—The contract for generator, switchboard, etc., for the municipal electric-light plant has been awarded to the WESTINGHOUSE ELECTRIC & MFG. CO., East Pittsburgh, Pa.

Wilmington, Del.—The installation of a new lighting system on Market St. is being considered. It is proposed to erect ornamental lamp standards and to place four tungsten lamps on each.

+Fort Howard, Md.—Contracts for installing an electric light plant and system, for which bids were opened June 12, have been awarded as follows: S. J. WATSON, JR., Hampton, Va., wiring and repairing building, $17,931; NATIONAL ELECTRICAL SUPPLY CO., Washington, D. C., poles, lines, switches, etc., $4,861; THOMAS C. BASSBOR CO., Baltimore, Md., meters and transformers, switchboard and engines, $7,523, and to L. B. JACOBS, Newark, Del., for the building, $2,020.

Washington, D. C.—Bids will be received by H. L. Pettus, Mjr., and Q. M., U. S. A., Depot Quartermaster, until 11 a. m., Aug. 18, for constructing a boiler house at the War College, Washington Barracks, D. C. Information furnished on application.

Washington, D. C.—Bids will be received until Aug. 16 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for furnishing and installing lighting fixtures in the U. S. Buildings at Asbury Park, N. J.; Bradford, Pa.; Chelsea, Mass.; Greensburg, Pa.; Beverley, Mass., and Chambersburg, Pa.

Bids will be received at the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., until Aug. 8 for furnishing the supplies as follows: Brooklyn, N. Y., Schedule 3,781, 2,000 ft. lead covered cable; Portsmouth, N. H., Schedule 3,787, 8,020 lbs. copper wire.

+Roanoke, Va.—Contracts have been awarded by the Roanoke Gas & Water Co. as follows: BARTLETT-HAYWARD CO., 1416 Continental Trust Bldg., Baltimore, Md., for gas holder, and UNITED GAS IMPROVEMENT CO., Philadelphia, Pa., for water gas-set. W. W. Randolph, 165 Broadway, New York, N. Y., is Engr.

Huntington, W. Va.—The Ohio Valley Electric Ry. Co., is planning to install new machinery including two 2,000-HP. boilers and two 1,000-K.W. turbines.

+McMechen, W. Va.—The City Council has awarded the contract for street lighting to the OHIO VALLEY ELECTRIC CO., Benwood, W. Va.

Palatka, Fla.—Bids will be received by the City Council until Aug. 22 for street lighting for a period of five years. Twenty or more 2,000-candle-power arc lamps and 100 or more 30, 40 or 60-candle-power tungsten incandescent lamps will be installed.

Eufaula, Ala.—A Municipal lighting plant will probably be erected. The estimated cost is $50,000.

Dothan, Ala.—An electric plant for lighting purposes is contemplated by Charles Henderson of Troy, Pike County. Application to the City Council has been made.

Mobile, Ala.—All electric wires are to be placed under ground.

North Birmingham, Ala.—The report submitted by Martin J. Lide, Engr., engaged to make investigations of the municipal light and water plant at North Birmingham with a view of increasing its capacity for the purpose of supplying light and water to Greater Birmingham, reports an expenditure of approximately $179,870 will be necessitated, exclusive of any repairs at the pumping station. A plan to sell the water works is being considered. In this event, the cost of the light and power plant will be $170,901. He suggests that the water plant be sold for $70,000, making the total outlay for the electric plant $100,901.

+Chattanooga, Tenn.—A contract has been awarded to the GENERAL ELECTRIC CO., Schenectady, N. Y., by the Chattanooga Ry. & Light Co., for one 1,000 K.W. motor generator set, four 1,500 K.W. transformers and switchboard.

+Defiance, Ohio.—A contract has been awarded by the Auglaize Construction Co. to the AMBURSEN HYDRAULIC CONSTRUCTION CO., for the construction of development No. 1 on the Auglaize River near Defiance, Ohio. The dam is 28 ft. high and the total length of the concrete structure including the power house is 555 ft. Noted July 27.

Akron, Ohio.—Bids will be received until Aug. 7 by J. F. Barnhart, Clk. Board of Education, for furnishing and installing lighting fixtures in the South High School.

Columbus, Ohio.—The National Power Co., Cleveland, Ohio, has ben incorporated with a capital of $5,000, to erect a power plant to sell electrical current. The incorporators are Frank M. Cobb, A. H. Fiebach, A. G. Newcomb, C. E. McCambridge and J. L. Bushea.

Connersville, Ind.—Plans are being prepared for the construction of a dam across the Whitewater River and to erect and equip two power plants. E. D. Johnson is interested.

Sebewaing, Mich.—Bids will be received by J. Hummelein, City Clk., until Aug. 7 for the construction of a municipal election-light plant.

Niles, Mich.—Bids will be received by the Board of Public Works, of Niles, Mich., until Aug. 15 for two 300-KVA, 3-phase, 60-cycle, 600-r.p.m., belted generators, complete with slide rails, pulley and field rheostats; two 10-KW., 125-volt, 1,600-r.p.m. belted exciters, complete with slide rails, pulleys and field rheostats; also two switchboards to control the above generators. Hermann Roebeck is City Clk

+Fort Sheridan, Ill.—The following contracts for constructing a central heating and power plant, for which bids were opened June 16, have been awarded as follows: HEINE CHIMNEY CO., for stack, $3,900; WESTERN ELECTRIC CO., New York, N. Y., for machinery, $4,840, and to NILSON BROS., Chicago, Ill., for removing and installing new boilers, $17,975.

Chicago, Ill.—A contract has been awarded by the Chicago Rys. Co., 1165 N. Clark St., to the GENERAL ELECTRIC CO., for 300 four-motor car equipments, which includes 1,200 35-H.P. 226 motors and 600 K-35 controllers with auxiliary equipment for 300 cars.

+Quincy, Ill.—A contract for the installation of 118 ornamental lamp standards, each carrying five tungsten lamps, has been awarded by the Civic Improvement League, to the J. W. TURNER CONSTRUCTION CO., Des Moines, Ia.

+The Mississippi River Power Co., has secured the right-of-way through Adams Co. and proposes to build a belt line from Rock Island to St. Louis. The STONE & WEBSTER ENGINEERING CORPORATION, Boston, Mass., has the contract.

East Dubuque, Ill.—A plan to abandon the municipal electric lighting plant is being considered. If this is accomplished the Union Electric Co., Dubuque, Iowa will probably be given the contract.

+Peoria, Ill.—A contract for a heating, lighting and power plant to be installed at the Bradley Polytechnic Institute has been awarded to WALTER BENSON. The approximate expenditure will be $25,000.

Council Bluffs, Iowa.—The City Council has accepted the proposition submitted by F. A. Nash, Pres. of the Citizens' Gas & Electric Co., to install a new lighting system in the business section, providing a renewal of the present street lighting contract is made for five years. Under the terms of the contract the company is to install not less than 40 flaming arc lamps.

+Boone, Iowa.—A contract for furnishing and installing two 1,000 K.W. turbines in the plant of the Boone Electric Co., has been awarded to the ALLIS-CHALMERS CO., Milwaukee, Wis. The EDGEMOOR IRON CO. has a contract to furnish three 400 H.P. boilers.

+Tower, Minn.—Contracts have been awarded for the construction of the municipal electric plant, bids for which were opened July 18, as follows: The BOWE-BURKE CO., Duluth, Minn., for erection of power house, at $13,000; for electric and hydraulic equipment to the DWYER-FIELD CO., St. Paul, Minn., at $5,280, and to the WESTERN MISSABE CO., Duluth, Minn., for erection of transmission system, at $4,827. D. A. Reed, Duluth, Minn., is Consult. Engr.

Hill City, Kan.—See item under Water Supply—Irrigation.

La Cygne, Kan.—See item under Water Supply—Irrigation.

Topeka, Kan.—Plans are being considered for rebuilding the State power plant, for which bids will be asked in the near future.

Waterville, Kan.—See item under Water Supply—Irigation.

Valentine, Neb.—Plans are being prepared by J. S. Worley Co., Reliance Bldg., Kansas City, Mo., for the reconstruction of the dam at the hydro-electric plant.

+Mandan, N. Dak.—A contract for the construction of the power station of the municipal electric-light plant has been awarded to G. W. HAGGERT, Fargo, N. Dak. The estimated cost is $75,000.

Liberty, Mo.—Bids will be received by the Board of Trustees of the Odd Fellows' Home, Liberty, Mo., until Aug. 4 for furnishing material and constructing additions to the Old Folks' Building, power plant and pump houses. Separate bids for equipment and heating and plumbing apparatus. Plans and specifications are on file at the office of the Board, and at the office of J. H. Felt & Co., Archs., Kansas City, Mo.

+Jefferson Barracks, Mo.—A contract has been awarded to URBAUER-ATWOOD HEATING CO., for installing heating apparatus at $7,360. The cooking apparatus, bids for which were opened at the same time, will be furnished by the WROUGHT IRON RANGE CO. at $5,694.

St. Louis, Mo.—The St. Louis & Jennings Ry. Co. has been granted a franchise to build a 1-mile railway from the terminus end of the Union-Florissant line to West Walnut Manor.

El Dorado, Ark.—The El Dorado Light & Water Co., has been granted permission to erect a new power house and extend its water mains. Two sets of machinery will be installed. The franchise has been obtained.

Higden, Ark.—A concrete dam and hydroelectric power plant is under consideration, to be located on the Little Red River. Power will be transmitted to Pine Bluff and Little Rock. Dickinson & Watkins, State National Bank Bldg., Little Rock, are making an estimate of cost.

Pine Bluff, Ark.—The Pine Bluff Corporation contemplates enlarging its plant. B. C. Fowles, Pine Bluff is Mgr.

Texarkana, Ark.—The Texarkana Gas & Electric Co. has increased its capital for the purpose of making extensions and improvements. W. L. Wood, Jr., 116 E. Broad St. is Mgr.

Mexia, Tex.—The Mexia Light, Water & Sewerage Co. is preparing to install additional machinery in its lighting plant.

Mission, Tex.—The Mission Land Improvement Co. is preparing plans for the construction of an electric plant and ice plant and water-works system. The water-works system wil include the construction of a 50,000-gal. reservoir and a steel standpipe having capacity of 50,000 gallons. A pumping plant will also be installed.

Butler, Okla.—W. K. Kise, has been granted a franchise for a period of twenty years to construct and operate an electric-light plant.

Kingman, Ariz.—The Desert Power & Water Co., contemplates making extensions and improvements to its plant, including the installation of additional machinery, consisting of one 1,250-K.W. direct-connected generator and two 1,000-HP. boilers with auxiliary apparatus. F. A. Wilde is Pres. and F. A. Wilde, Jr., is Treas. and Gen. Mgr.

Provo, Utah.—The directors of the Knight Power Co. have decided to extend its line and connect up its different power plants. A new line from the Murdock power plant on Provo River, nine miles east of Heber, along Parley's Canyon, and on to Midvale will be built, it is stated. The estimated cost is $50,000.

Bremerton, Wash.—Bids will be received by the U. S. Marine Corps, Mills Bldg., Washington, D. C., until Aug. 7, for furnishing electric lighting fixtures for the marine barracks, navy yard, Puget Sound, Wash. For further information address the quartermaster U. S. Marine Corps, Washington, D. C.

+Fort Flagler, Wash.—A contract has been awarded to W. E. CHASE ENGINEERING CO., Spokane, for the installation of an electric lighting system at $29,900 for which bids were opened June 15.

Spokane, Wash.—The commissioner of public utilities recommended the installation of arc lights as follows: Garfield St. and Thirty-eighth Ave.; Stevens St. and Walton Ave.; Sanson Ave. and Morton St.; Freya St. and Twenty-second Ave.; Gordon Ave. and Perry St.; Second Ave. at the west end of the trestle.

Spokane, Wash.—It is reported that the Spokane Gas & Fuel Co., which is a subsidiary of the Cities Service Co., is planning to erect a gas plant with a daily output of 5,000,000 cu. ft. The estimated cost is $500,000.

Decato, Cal.—A street lighting system is under consideration.

Sacramento, Cal.—The Sacramento Electric, Gas & Ry. Co. has made application for franchises for three extensions into local suburbs.

North Columbia, Cal.—The St. Gothard Consolidated Gold Mining Co., operating the Delhi Mine, is planning to install an electric plant. The company owns a water right in Bloody Run and it is believed sufficient power can be developed. A survey has been made by F. C. Uren and Hamilton Eddy, Engrs. Five miles of flume and 1,000,000 ft. of lumber will be required.

Pasadena, Cal.—It has been decided to install ornamental brone lamp post and necessary wiring, etc., on Orange Grove Ave., from Columbia to Columbus Sts. and on Colorado, Columbia and California Sts. John Beyer is Street Supt.

Sacramento, Cal.—The Citizens Light & Power Co. a subsidiary of the Great Western Power Co. will install an underground conduit system and mill wire the city for lighting and power purposes. The total expenditure will be about $1,500,000. Geo W. Peltier is Pres.

San Francisco, Cal.—The Pacific Gas & Electric Co. plans to develop an additional 71,000 hydro-electric HP. at a cost about $10,000,000.. The plans provide for the erection of a dam in the canyon of the South Yuba River which will increase the present water storage from fifteen lakes in Nevada and Placer counties by 2,500,000,000 cu. ft. G. C. Holburton, 445 Sutter St., San Francisco, is Ch. Engr.

Santa Maria, Cal.—A franchise has been granted to the Santa Maria Gas Co., to extend its mains from this city to Nipomo, Arroy Grande and San Luis Obispo. R. E. Easton made the application for the franchise.

hydro-electric plant having a capacity of about 1,000-HP. The electrical energy will be transmitted to the local mines and smelters, including those of the Calumet & Sonora Copper Co., the Llano Consolidated Copper Co., the Sonora Copper Co. and the Cobriza Copper Co. The dam [illegible] be 150 ft. high and from 15 to 1[illegible] wide. Power for irrigating about [illegible]000 acres of land will be supplied.

Wilkie, Sask.—See item under Water Supply—Irrigation.

Noria (Sonora), Mex.—H. A. Smith has prepared plans for the construction of a dam across [illegible] deep canyon near here and the installation of a

BRIDGES

(**+***Denotes a contract awarded.*)

Danbury, Conn.—Plans for new bridges over the railroad tracks at White St. and at Montgomery St., over the Mad River, are being considered to be probably of steel and concrete respectively. For further information address City Clerk, Danbury.

Hartford, Conn.—We are officially advised that bids will soon be asked by the Board of Contract and Supply, for constructing a steel girder bridge, with 2 50-ft. spans, estimated cost, 5,000. R. W. Clark is City Engr.

New York, N. Y.—Bids will be received by the Department of Bridges until 2 p. m., Aug. 10, for removing the Old Pelham bridge over Eastchester Bay, in Pelham Bay Park, Borough of the Bronx. Arthur J. O'Keeffe is Comr.

+Plainfield, N. J.—The contract for constructing a reinforced-concrete bridge over Green Brook at Washington Ave., was awarded on July 27 to the FERRO CONCRETE CO., Harrisburg, Pa., at $8,390. This amount includes $7,990 for the construction, and $400 for removing the old structure. The material to be used will be asphalt, though bids were submitted on both that and amiesite. The following are the bids received: Richard & Gaston, removal $500, asphalt, $9,400, amiesite, $8,900; Nelson-Meredith Co., removal $350, asphalt, $11,980, amiesite, $11,950; Carmer & Lansen, removal, $950, asphalt, $14,185, amiesite, $14,185; F. W. Schriner, Jr. Co., removal, $600; asphalt, $10,517; amiesite, $10,142; Arthur E. Smith, removal, $400, asphalt, $8,576, amiesite, $8,412; M. Byrnes, removal, $800; asphalt, $11,897; P. A. Hennessey, removal, $500; asphalt, $8,460, amiesite, $8,400; Ferro Concrete Co., removal, $400, asphalt, $7,990, amiesite, $7,745.

Harrisburg, Pa.—Bids will be received by the Board of Commissioners of Dauphin County, until noon, Aug. 12, for constructing a concrete bridge over Paxton Creek on the road leading from Maclay St. to Linglestown. J. S. Hoffman is Chn. Comrs., and D. F. Lebo, Clk.

Pittsburg, Pa.—Bids will be received by R. J. Cunningham, County Controller until 2 p. m., Aug. 11, for constructing two reinforced-concrete bridges and for constructing reinforced-concrete sidewalks on Bridge No. 4, over Chartiers Creek. Specifications and plans can be seen, and blanks for bidding obtained at the office of the County Engineer, Court House.

+Pittsburg, Pa.—We are officially advised that the contract for constructing a steel truss 75-ft. span, carried on concrete abutments and concrete foundations, over Sewickley Creek on the Allengheny-Beaver County line, has been awarded to the CAPITOL CONSTRUCTION CO., Columbus, Ohio. Noted July 20.

Sharon, Pa.—Press reports state that surveys are being made by the engineers of the American Steel & Wire Co. for a viaduct over the tracks at Staunton St.

+Pittsburg, Pa.—The contract for the masonry of the steel bridge to be erected over the Monongahela River near New Geneva, has been awarded to McMINAMIM & SIMS, Arcade Bldg., Philadelphia, Pa. The contract for the superstructure will be awarded within 60 days.

Washington, Pa.—Bids will be received by John H. Moffitt, County Controller, until Aug. 4, for constructing bridges as follows: Monongahela Bridge through truss span 110 ft., 24-ft. roadway; Bentleyville Bridge, plate girder 56-ft. span, 20-ft roadway; Brick Church Bridge, pony truss span, 56 ft. 14-ft roadway; Finleyville Bridge, plate girder, 60-ft. span, 16-ft. roadway; Kamp Bridge, plate girder, 45-ft. span, 16-ft. road; Charleroi Bridge, to be reinforced concrete arch, 40-ft. span, and Sparta Bridge, 19-ft. span. Chaney & Armstrong, Washington, are County Engrs.

Clintwood, Va.—Bids will be received by the Clerk of the Circuit Court, Clintwood, until noon, Aug. 3, for constructing two bridges as follows: A 214.5-ft. steel bridge, with 12-ft. roadway, rubble masonry abutments and concrete piers, over Russell Fork, about 20 miles from Coeburn; a 79.3-ft. steel bridge, with 12-ft. roadway, rubble masonry abutments and concrete piers, over McClure's River, about 20 miles from Coeburn. Plans are on file with the Clerk of the Circuit Court and with the Childrey Sunday Co., Richmond. P. St. J. Wilson, Richmond, is State Highway Comr.

Sparta, Ga.—Bids will received by the Commissioners of Roads and Revenues until Aug. 3, for constructing a steel highway bridge, 100 ft. long and 16 ft. wide, in the clear, over Little Buffalo Creek. W. E. Wiley is Clk. of Comrs.

Mayersville, Miss.—Bids will be received until Aug. 7 by M. M. Spiars, County Clk., for repairing and placing new draws in all county bridges over Steel Bayou.

New Orleans, La.—Bids will be received in about six weeks for construcing a bascule bridge over Old Basin Canal, New Orleans. W. J. Hardee is City Engr. and the Strauss Bascule Bridge Co., Fort Dearborn Bldg., Chicago, are Consult. and Design. Engrs.

Bucyrus, Ohio.—Bids will be received by the Board of Commissioners of Crawford County, until noon, Aug. 19, for the construction of the superstructure of the Sutter steel bridge in Jackson Township, Crawford County. The bridge will have four panels, 11 ft. each, extreme length 44-ft., with 16 ft. clear roadway, in accordance with the plans and specifications on file with A. F. Ackerman, County Audr.

+Cincinnati, Ohio.—The contract for the construction of the superstructure of the Gilbert Ave. viaduct has been awarded to the KAPS-BREHM CO., First National Bank Bldg., Cincinnati, at $144,999.

Cleveland, Ohio. — Bids will be received by the Board of Commissioners of Cuyahoga County until 11 a. m., Aug. 26, for the construction of bridge work per Report No. 2854, concrete bridge, Lee Road, Bedford Township; Report No. 2855, wing walls, Broadview Road, Breckville-Royalton Township, in accordance with the form of contract and specifications to be furnished by Frank R. Lander, County Surv. John F. Goldenbogen is Clk. of Comrs.

Hamilton, Ohio. — Bids will be received by J. E. Brate, County Audr., until 10 a. m., Aug. 5, for constructing a steel and concrete bridge on the road from Middletown to Poast Town, Lemon Township, a bridge over Tallawanda Creek, and a bridge over the M. & E. canal on Grand Boulevard.

+Pomeroy, Ohio.—The contract for the bridge across Leading Creek, at Bingham's Mill, has been awarded to the CAPITOL CONSTRUCTION CO., of Columbus, Ohio. The bridge is to be a reinforced-concrete arch, with a 100-ft. span. The abutments are 18 ft. long.

Albion, Ind.—Bids will be received by the County Commissioners until Aug. 8, for the construction of three bridges and two culverts.

Delphi, Ind.—Bids will be received by the Commissioners of Carroll and Clinton Counties until Aug. 15 for constructing a bridge over Robinson's Branch on the county line. M. G. Haun is Audr. Carroll County.

Fowler, Ind.—Bids will be received by the County Commissioners until Aug. 7, for constructing seven bridges. Lemuel Shipman is County Audr.

Franklin, Ind.—Bids will be received by the County Commissioners until Aug. 7, for constructing a reinforced-concrete bridge and a steel I-beam bridge with a concrete floor. W. B. Jennings is County Audr.

Indianapolis, Ind.—Bids will be received by the County Commissioners until Aug. 11, for constructing five culverts and one bridge. Albert Sashm is County Audr.

Shelbyville, Ind. — Bids will be received by the Board of Commissioners of Shelby County, until Aug. 12, for constructing two concrete arch bridges.

+South Bend, Ind.—We are officially advised that the contract for constructing a reinforced-concrete arch bridge with four spans of 105 ft. each, was awarded on July 26 to C. L. COPP, at $64,350. Wm. S. Moore is City Engr. Noted July 7.

***Grand Rapids, Mich.**—Bids will be received by the Board of Public Works, E. H. Christ, Pres., until 8 p. m., Aug. 24, for constructing the Leonard St. reinforced-concrete bridge over Grand River.

***Chicago, Ill.**—Bids will be received by L. E. McGann, Comr. Pub. Wks., until 11 a. m., Aug. 12, for the construction of the superstructure of a Bascule bridge over the south branch of the Chicago River at Washington St.

+Dixon, Ill.—A contract has been awarded to JOHN DEVINE, Dixon, for bridge work, as follows: Constructing a 150-ft. steel and concrete bridge across Green River; moving and re-erecting a 60-ft. bridge; constructing a 24-ft. reinforced-concrete bridge.

+Waterloo, Iowa.—The contract for constructing a bridge and dam on the Whitney Road, has been awarded to SPILLMAN & STEWART, Waterloo, at $7,043.

Newton, Kan.—Bids will be received until 10 a. m., Aug. 8, for constructing a bridge on East First St., according to plans and specifications on file with F. E. Devlin, City Engr.

Ipswich, S. Dak. — Bids will be received by W. P. Wilson, County Audr., until 10 a. m., Aug. 9, for constructing all bridge work required in the county until March, 1912.

+Fargo, N. Dak. — We are officially advised that a contract has been awarded to JARDINE & ANDERSON, Fargo, for bridge work, as follows: 20-ft. wooden bridge between sections 29 and 30, Empire Township, including wings; 22-ft. wooden bridge between section 30, Empire Township, and section 25, Ayr Township, including wings; 32-ft. concrete bridge in the Village of Tower City, with 10-ft. abutments and 8-ft. wings; 20-ft. concrete bridge between section 36, Everest Township and section 1, Maple River Township, with 7-ft. abutments, steel stringers and concrete driveway. Noted July 6.

Marysville, Mo.—Bids will be received by the County Commissioners until Aug. 10, for constructing ten bridges and one concrete culvert, and repairing eleven bridges. J. E. Reese is Highway Engr.

St. Louis, Mo.—Bids will be received by the Board of Public Works until noon, Aug. 15, for constructing the third and fourth sections of the municipal bridge, consisting of the foundation, retaining wall and steel structure of the west approach. Charles M. Talbert is Asst. to Pres. Bd. Pub. Wks., and Wm. T. Findly is Secy.

Sibley, Mo.—Press reports state that the Atchison, Topeka & Santa Fe R. R. has announced its intention of constructing a double track bridge over the Missouri River at Sibley. The bridge proper will cost $1,235,000; grading reductions, $349,000; 4 miles of second track, $160,000, making a total expenditure of $1,744,000.

+Richmond, Tex. — THE MISSOURI VALLEY BRIDGE CO. has been awarded the contract by the Commissioners' Court for the erection of two steel bridges across the Brazos River, at $28,500.

Reno, Nev.—Bids will be received by W. A. Fogg, County Clk., until noon, Aug. 17, for constructing a steel bridge four miles east of Reno.

Eureka, Cal.—Bids will be received by George W. Cousins, Clk. Bd. Supervs., until 2 p. m., Aug. 15, for constructing a bridge about 260 ft. long, over Bear River.

Jackson, Cal. — Bids will be received zy J. R. Huberty, Clk. Bd. Supervs., until 2 p. m., Aug. 7, for constructing a steel bridge across Jackson Creek.

Merced, Cal.—Bids will be received by the Board of Supervisors, P. J. Thornton, Clk., until 10 a. m., Aug. 8, for constructing a steel bridge across the Merced River on the Arundel Road, in Road District No. 3; three trestle bridges over sloughs on the Hill's Ferry and Livingston Road, and one trestle bridge over a creek on the Burrows Road in Road District No. 4.

+Modesto, Cal.—A contract for constructing four bridges has been awarded to the PACIFIC CONSTRUCTION CO., 16 California St., San Francisco, at a total bid of $63,262. The bids were: Empire Bridge — Cotton Bros. & Co., plain floor, $49,983, McMillan floor, $54,983; Pacific Construction Co., $36,976, $42,476; Thompson Bridge Co., $47,000, $51,500; Burrell Bridge & Construction Co., $51,400, $57,250; Healey Tibbits Construction Co., $38,000; San Francisco Bridge Co., $48,800, $34,800; Clark & Henry Construction Co., $37,000, $39,960. Bridge across Little John's creek: Pacific Construction Co., $11,395; Healy-Tibbetts Construction Co., $15,000; Clark & Henry Construction Co., $12,600; San Francisco Bridge Co., $12,900. Dry Creek Bridge, near Paulsel—Pacific Construction Co., $4,991; Clark & Henery Construction Co., $5,800; Healey-Tibbetts Construction Co., $7,000; San Francisco Bridge Co., $3,300. Dry Creek Bridge, near Warnerville—Clark & Henry Construction Co., $6,300; Healey-Tibbetts Construction Co., $6,900; Pacific Construction Co., $6,400; San Francisco Bridge Co., $10,800.

Modesto, Cal.—Bids will be received by the Board of Supervisors of Stanislaus County, until 11 a. m., Aug. 15, for constructing two bridges.

Santa Barbara, Cal.—Bids will be received by the Board of Supervisors until Aug. 7, for the construction of a bridge across Montecilio Creek. C. A. Hunt is County Clk.

Lachine, Que.—Press reports are to the effect that the Federal Parliament has voted the sum of $80,000 for the construction of a bascule bridge over the Lachine Canal, between Lachine and Cote St. Paul. Plans for the substructure have been approved and bids will be asked as soon as the plans for the superstructure are approved by the Department of Engineers.

Elderslie (Chesley post office), **Ont.**—Bids will be received by S. K. Ewart, until Aug. 3, for constructing two steel bridges, one over Snake Creek and the other on the county line. The span of the bridges is to be 45 and 36 ft. respectively.

Walkerton, Ont.—Bids will be received by the County Council until Aug. 5, for constructing two 125-ft. spans and one 90-ft. span over the Saugeen River. Jas. Warren, Walkerton, is Engr.

BUILDINGS.

(**Denotes that this work is advertised in Engineering News.*)

+Pownal, Vt.—The contract has been awarded to THE COLE-MORTLAND CO., Saving Bank Bldg., Bennington, Vt., for the construction of a concrete block church at Pownal, Vt. The building with the exception of interior trims, will be entirely of concrete.

Boston, Mass. — A 10-story office building is to be built by the Columbian National Life Insurance Co. at Franklin and Arch Sts.

Braintree, Mass.—It is proposed to rebuild the town hall recently destroyed by fire.

Chelsea, Mass.—Bids will be received by the Board of Control until Aug. 8 for the erection of a schoolhouse on Central Ave., also for the plumbing, heating and ventilation systems of the same. Kilham & Hopkins, 9 Park St., Boston, are Archs. William E. McClintock is Chn. Bd. of Control.

Holyoke, Mass.—Bids will soon be asked for the construction of a 5-story brick block, 75 ft. × 122 ft., 25 apartments, for Mrs. Louisa Tracy, to be erected on Elm St.

+Newton, Mass.—The contract for the Congregational Church at Waban has been awarded to WILLIAM B. McMULLEN. To be 77 ft. × 51 ft., and of stone, terra cotta and plaster. Jos. H. Tichie, 8 Beacon St., Boston, is the Arch.

+New Braintree, Mass.—The contract for the erection of a congregational church has been awarded to W. H. FULLAM, North Brookfield. E. P. Chapin, Worcester, is the Arch.

New Bedford, Mass.—E. G. Bullard, Arch., has been retained by the City Committee to prepare plans for the construction of a $150,000 school.

+Newburyport, Mass.—The KELLY BROS., of Haverhill, have received the contract for masonry work on the proposed police station at Newburyport.

Pittsfield, Mass.—Plans are being drawn for a $60,000 Masonic building.

+Quincy, Mass.—The contract for the construction of a new probate and district court house for Norfolk County at Quincy, has been awarded by the county commissioners to WILLIAM CRANE, 7 Water St., Boston, at $60,756.

+Salem, Mass.—The contract for the $70,000 theatre building on Federal St. has been awarded to DAVIS, HAINES & DAVIS, Lynn. To be 85 × 122 ft., wood covered with asbestos. Dana A. Sanborn, Lynn, is the Arch.

Wakefield, Mass.—A high school is planned in the near future. Geo. E. Walker is Chn. of School Com.

+Providence, R. I.—The J. W. BISHOP CO., 107-109 Foster St., has the contract for the erection of a $100,000 office building in Providence, R. I., for M. Steinert & Sons.

East Providence, R. I.—Plans are being prepared for a schoolhouse at Riverside, to cost $40,000. Leslie P. Langworthy, Providence, is the Arch.

+New Haven, Conn.—Contracts for the erection of a theatre on Church St. for S. Z. Poli, have been awarded as follows: Steel work, MADDEN & CO., New York; mason work, JOHN N. LEONARD & CO.; carpenter work, cornices, skylights, painting and plate glass, CHARLES MCFEETERS. The building will be of brick and concrete, fireproof construction, 92 × 136 ft. and 60 ft. high, with terra cotta trim. The seating capacity will be 1,750, and the building will cost about $225,000.

The V. J. HEDDEN & SONS CO., 1 Madison Ave., New York, general contractors for the Hotel Taft, at Chapel and College Sts., have awarded subcontracts as follows: Ventilating apparatus, The ROURKE BROS CO., New Haven; heating, M. J. DALY & SONS, INC., Waterbury, Conn.; boilers, The BABCOCK & WILCOX CO., New York. (Other sub-contracts noted in issues of Feb. 2 and Mar. 2.) F. M. Andrews, 22 Metropolitan Bldg., New York City, is the Arch.

+New Haven, Conn.—The WESTINGHOUSE-CHURCH-KERR CO., of New York, have been awarded the contract to build a brick, steel and concrete blacksmith shop at the plant of the Winchester Repeating Arms Co., on Mason St. The building will be 51 × 140 ft., two stories high.

Ridgefield, Conn.—Esitmates are being received on plans drawn by Archs. Butler & Rodman, 16 East 23d St., New York city, for a stone and stucco residence with reinforced concrete floors, 40 × 126 ft. to be erected here for C. P. Dixon, 52 West 49th St., New York City.

Stamford, Conn.—Estimates will be received soon for the erection of a church edifice at Bedford Park, for the First Congregational Society. The plans are being completed by G. F. Newton, Arch., 6 Beacon St., Boston, Mass., and provide for a building 145 × 82 ft., of stone with a tower 70 ft. high. The first floor will contain the main auditorium, pastor's study and Sunday-school rooms, and the basement, the kitchen and social rooms. The cost will be about $60,000. The pastor, Rev. Lewis F. Berry, is Chn. of the building committee.

+Waterbury, Conn.—Contracts for the store and office building for the George L. Lilley Co. on West Main St., have been awarded as follows: Mason and carpenter work, The TRACY BROS. CO.; concrete and steel work, THE STANDARD CONCRETE STEEL CO., New York City; plumbing and heating, M. J. DALY & SONS, INC.; cut stone, THOMAS F. JACKSON; electrical work, The NEW ENGLAND ENGINEERING CO.; painting, E. J. NIELSON, all of Waterbury. The building will be 63 × 120 ft., eight stories high, with front of light pressed brick, with limestone trim. Griggs & Hunt, 51 Leavenworth St., are the Archs. (Noted Mar. 9.)

New York, N. Y.—Bids will be received by the Dept. of Health of the City of New York, southwest corner of 55th St. and Sixth Ave., until Aug. 22, for furnishing all the labor and materials necessary or required for the erection and completion of a measles pavilion, together with all necessary alterations and other work incidental thereto, as indicated by the specifications, on the grounds of the Willard Parker Hospital, at the Foot of East 16th St., Borough of Manhattan, City of New York.

Bids will be received by the Department of Education, Park Ave. and 59th St., New York City, until Aug. 14, for the general construction, etc., of additions to and alterations in Public School 20, on the southerly side of 167th St., between Fox and Barretto Sts., Boro. of the Bronx. For the general construction, etc., of portable school buildings, at Annex to Public School 32, on the southwest corner of Prospect Ave. and Poplar St., Douglaston Heights, and Annex to Public School 46, westerly side of Lefferts Ave., 100 feet south of Hawtree Ave., Glen Morris, Boro. of Queens.

New York, N. Y.—The Montefiore Home for Chronic Invalids will spend $1,000,000 on its Bronx buildings. Plans were filed by Arnold W. Brunner and Buchman & Fox, as architects. Eight structures will cover the blocks bounded by Gun Hill Rd., 210th St., Steuben and Woodlawn Aves. They will vary in size from two to four stories. Jacob H. Schiff is Pres. of the institution, which sold its old home recently on Broadway, 138th to 139th Sts. and Hamilton Pl., to Leopold Kahn. B. J. Greenhut, Treas.

***Malone, N. Y.**—Bids will be received by John P. Badger, Pres. Board of Trustees, Northern New York Institute of Deaf Mutes, Malone, until 4 p. m., Aug. 16, for construction, including heating, plumbing and electric work for administration building, including alterations in existing rear extension and for two dormitory buildings for boys and girls at the institute.

Lockport, N. Y.—The Board of Trade has approved the proposition of the Lockport tuberculosis Committee and Lockport Academy of Medicine favoring the selection of a 96-acre site east of Lockport for the location of a new tuberculosis hospital at a cost of $120,000.

Long Island City, L. I., N. Y.—Plans have been filed for the construction of a $600,000 storage warehouse. The Tubes Realty Co. is the owner. The building will occupy the big block on Jackson Ave., between Beech and Crane Sts., and will extend from Jackson Ave. to the freight yards of the Long Island R. R. It will be six stories in height and will be constructed of reinforced concrete, faced with ashlar and brick.

+West Point, N. Y.—The contract, amounting to over $40,000, for excavating in connection with the erection of the new academic building for the West Point Military Academy has been awarded to WILLIAM J. DUFFY, of Highland Falls, and GARRETT & GAHRAN.

Yonkers, N. Y.—The Common Council, of which Daniel Cashin is Pres., has designated William P. Katz, Arch., to prepare plans and specifications for a fire house in South Yonkers, to cost not to exceed $40,000.

Schenectady, N. Y.—Announcement was made that the General Electric Co. has agreed to build a new $75,000 building for the Edison Club, an orization with a membership composed of college graduates employed by the company her. It is expected that work will be started in the fall on the new structure, which will be up to date in every detail, especially in relation to sporting equipment.

Peekskill, N. Y.—Bids will be received until Aug. 23 by James Knox Taylor, Super. Arch., Treasury Dept., Washington, D. C., for alterations and repairs to the U. S. post-office.

East Orange, N. J.—Bids will be received at the office of Wilbur F. Sadler, Jr., Adj. Gen., Sea Girt, until Aug. 8, for erecting an armory at East Orange.

+Plainfield, N. J.—The contract has been awarded to JOHN ABBOTT for the reconstruction of Mt. St. Mary's College, on Watchung Mountains. The cost of the building is about $200,000.

Edenburg, Pa.—Bids will be received by Harvey Brakeman, Arch., Franklin, Pa., until Aug. 3, for erecting a three-story brick, stone and concrete theatre and hall for Knox Lodge.

Philadelphia, Pa.—Plans have been prepared by Philip H. Johnson, Land Title Bldg., Philadelphia, for the construction of a home for indigent. The Department of Health & Charities is the owner. The building will be erected at Holmesburg and be of brick, stone and steel, three stories high and of fireproof construction. The cost is about $695,000.

Baltimore, Md.—Ephraim Macht, 13 East Fayette St., has purchased site on Ruxton Rd. and Baker St.; will cut streets through and erect about 150 two-story dwelling houses. Will be of brick and stone construction. Cost, about $250,000.

Baltimore, Md.—Plans are being prepared under the direction of the Supervising Architect, at Washington, D. C., for the construction of a immigration station at Baltimore, Md. The cost is about $130,000.

St. Anges Hospital, Wilkens Ave., has plans and specifications by Arch. Theodore Wells, Pietsch, 1001 American Bldg., for a sun parlor and observatory building, four stories, brick, slag roof.

Henry J. Tinley, Arch., will complete plans and specifications for proposed apartment house to be erected at Main and Garrison Aves., in about ten days. Will be of brick construction, trimmed with stone, cost $7,500. Slate roof, steam heat. Bids will be asked shortly. Owner's name withheld.

Bluefield, Va. — H. M. Miller, Roanoke, Arch., has been awarded the contract to furnish plans and specifications for a six-story concrete and pressed brick store and office building in Bluefield. The structure will cost $100,000. It is being built by a company of which D. E. French is Pres.

Chatham, Va.—Pittsylvania County announces that they will erect an addition to present jail building; will be of stone construction. S. S. Hurt, Clk of Court.

+Norfolk, Va.—M. S. Spratley awarded contract to EAST & HOBBS, Norfolk, Va., for erection of Tazewell Theatre; pressed brick and terra cotta construction; green tile trimmings, elliptical plate glass front; glass and bronze hood extending over sidewalk; will seat about 2,000. Plans by E. C. Horn & Co., New York City.

Lynchburg, Va.—The Lynchburg Academy of Music are contemplating the erection of their theater which was recently destroyed by fire. Brick, three-story.

+Norfolk, Va.—The contract has been awarded to J. HENRY MILLER, INC., at about $400,000, for the construction of a new Union station at Norfolk. The building, which will be known as the Norfolk Terminal Station, will be used jointly by the Norfolk and Western and the Norfolk and Southern Railroads. It will be situated at Main St. and Lake Ave., the principal building occupying a space 200 × 50 ft. With the wings and other parts the structure will cover an area of about three city blocks. The main structure will be of granite and limestone, with terra cotta trimmings and tapestry brick. The first floor will consist of waiting rooms and ticket offices and the upper floors will be used for offices.

Richmond, Va.—Casino Theater Co., incorporated with $50,000 capital stock; S. Galeski, Pres.; E. P. Harris, Sec.-Treas.; both of Richmond, Va., will erect theater. Exact location not yet decided; will be of brick construction, trimmed with marble.

+Richmond, Va.—Contracts for the construction of both the Madison school for whites and Buchanan St. public school for negroes were awarded to A. M. WALKUP. The Madison school is to cost $70,000 and the Buchanan St. school $28,400. Both buildings will be of brick, steel and concrete and will be fireproof. The Madison school will accommodate 1,000 pupils. Contracts for supplying both schools with heating and ventilating systems were awarded to the AMERICAN HEATING & VENTILATING CO., at a total of $12,700. All the contracts are subject to the approval of the council.

Fairmont, W. Va. — Plans are being prepared for the construction of a freight terminal of the Fairmont & Clarksburg Interurban Ry. The structure will be located on corner of First St. and Fairmont Ave.

+Wellsburg, W. Va.—It is reported that the Board of Education has awarded the contract to E. R. BEAR, Pittsburg, Pa., for the construction of the proposed eight-room high school here. The other bidders were: Perkins, Jackson & Woods, Wheeling, W. Va.; E. E. Bope, Columbus, Ohio; E. K. Hibbs, Columbus, Ohio; Prescott Construction Co., Lorain, Ohio; and D. T. Riffle, Pittsburg, Pa.

Fayetteville, N. C.—The Phoenix Masonic Temple Co. will construct a five-story office at Lafayetteville, it is reported. The cost will be about $100,000.

+Raleigh, N. C. — The contract has been awarded to J. B. CARR & CO. for the erection of the new $80,000 bank building by The Raleigh Banking & Trust Co. The building will be in two sections, one section to be completed for the bank to occupy before the main part of the present old historic round-step bank building is torn down, the bank to occupy the new section while the corner section of the new building on Fayetteville and Hargett Sts is being built. The building will be three stories and will have a series of massive marble pillars, each three stories high at intervals along both the Fayetteville and the Hargett St. fronts.

***Gadsden, Ala.**—Bids will be received by James Knox Taylor, Superv. Arch. Treasury Dept., Washington, D. C., until Sept. 5, for the enlargement and completion (including plumbing, gas piping, heating apparatus, and electric conduits and wiring) of the U. S. Office at Gadsden, Ala. Drawings and specification may be obtained from the Custodian of the building at Gadsden, Ala., or at the office of the Superv. Arch.

Plaquemine, La.—Bids will be received by the Parish School Board until Aug. 12 for constructing a 3-story school.

Louisville, Ky.—It is reported that the Clay Lewis Hotel Co. will erect a five-story hotel for negroes at Louisville. The estimated cost is $75,000.

Canton, Ohio.—Plans and specifications have been accepted for the school at Cedar St. The estimated cost is $48,000. Plans were prepared by Howard & Merriam, Archs., Columbus.

Toledo, Ohio.—M. M. Stophlet, 606 Nasby Bldg., is revising plans on the three-story and basement hospital building, 175 × 41 ft., for the Flower hospital, care Dr. E. O. Cristi, 2044 Maplewood Ave. Cost, $100,000.

Wellsville, Ohio.—It is reported that William G. McCullough has announced that he will build a children's home for Northeastern Ohio and donate land and money for such an institution at a cost of about $250,000. The home is to be under the general supervision of the Salvation Army.

Laporte, Ind.—The Boston Store Cooperative Co. has plans ready for bidders for the construction of a business block. The building will be constructed of white enamel brick and front 185 ft. on Main St.

Alpena, Mich. — Spier, Rohns & Gehrke, 1325 Chamber of Commerce Bldg., are about ready for figures on a two-story and basement school building, 80 × 60 ft., for Alpena, Mich. Cost, $40,000.

+Carlton, Mich.—Mildner & Eisen, 1018 Hammond Bldg., Detroit, Mich., has awarded the general contract for a two-story and basement hotel, 150 × 90 ft., for Frank Marx, Wyandotte, Mich. Contract let to FRANK REITER, Carlton, Mich. Cost, $35,000.

Detroit, Mich.—Albert Kahn & E. Wilby, 800 Trussed Concrete Bldg., will soon take bids on a new one-story garage, 175 × 40 ft., for the Kahn Realty Co., Trussed Concrete Bldg. Cost, $20,000.

Detroit, Mich.—Albert Kahn & E. Wilby, 800 Trussed Concrete Bldg., are ready for figures on a one-story auto garage, 425 × 175 ft., for the Koster Motor Sales Co., Joseph Chene, Sup't, 742 Woodward Ave. The building to be of press and stock brick, structural iron construction, cement floor and electric fixtures. Cost, $10,000.

+Detroit, Mich.—Malcomson & Higginbotham, Moffat Bldg., have awarded the masonry contract for the $1,000,000 addition to Harper Hospital, C. A. ALBRECHT, Penobscot Bldg.

Detroit, Mich.—The Board of Education of the City of Detroit, William J. Lee, Secy., 50 Broadway, will receive bids until Aug. 8 on a two-story and basement school, 200 × 91 ft. Cost, $80,000. Malcomson & Higginbotham are Archs., Moffat Bldg.; Ammerman, McColl & Anderson, Consult. Engrs., Penobscot Bldg.

Detroit, Mich.—Mildner & Eisen, 1018 Hammond Bldg., are preparing plans for a five-story and basement store building, 35 × 100 ft., for the Bank Floral Co., 153 Bates St. The building to be of reinforced concrete construction. Cost, $45,000.

Grand Rapids, Mich.—Robinson & Co., Houseman Bldg., Grand Rapids, Mich., are preparing plans for a coliseum, two stories and basement 50 × 120 ft., for Henry J. Heystek, care Heystek & Canfield, Grand Rapids, Mich. Cost, $38,000.

Grand Rapids, Mich.—The Holland U. B. A. Home, Fulton St., Grand Rapids, have voted to increase the cost of the home from $30,000 to $50,000. Osgood & Osgood, Archs., Widdicomb Bldg.

+The Clark Memorial Home of Grand Rapids, Mich., have awarded the general contract for their new two-story and basement, 47 × 108, to HOSKIN & SON, Grand Rapids. Cost, $40,000.

Monroe, Mich.—Bids will be received until Aug. 29 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for a U. S. post office at Monroe.

Chicago Heights, Ill.—Bids were received as follows on July 31, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for construction of a post office building at Chicago Heights, Ill.: (a) limestone; (b) sandstone. King Lumber Co., Charlottesville, Va., (a) $48,750; (b) $50,250. Barnes Bros., Logansport, Ind., (a) $61,470; (b) $64,470. Christ Kanzler & Son, Evansville, Ind., (a) $76,065; (b) $77,195.

Chicago, Ill.—It is reported that the Bowes Realty Co. has concluded a deal for the Lake Shore auto station now at State St., near Walton Pl., whereby a building is to be erected for its business at 1512 to 1518 North Clark St., the lot having a frontage of 102 × 152 ft., the total investment approximating $50,000.

A store and office building will be erected here. The building will be two stories high and will contain seven stores, six offices and four flats. It is to be erected at South 40th Ave. and West 26th St. The site has been leased by Herman Stern to Herbert L. Stern, Samuel A. Marx and Lawrence F. Stern for 99 years at an annual rental of $1,800.

It is reported that an office building costing about $250,000 will be erected as an annex to the Ashland Block.

Alexander Friend & Co. will erect on the east side of Desplaines St. an eight-story fireproof building. The cost will be about $100,000. Plans are being prepared by Alfred S. Alschule.

+Fort Atkinson, Wis.—Van Ryn & De Gelleke, Archs., Caswell Blk., Milwaukee, Wis., awarded the general contract for the erection of a new high school building to J. O. HUGHES, Platteville, Wis.; plumbing, W. S. PATTERSON CO., Appleton, Wis.; heating, M. E. FLAHERTY, Milwaukee. Cost, $110,000.

Madison, Wis.—The Board of Regents, University of Wisconsin, has authorized the expenditure of $150,000 out of the university appropriation for the construction of an annex to the gymnasium. Plans are now being prepared by the university architects. Arthur F. Peabody is Consult. Arch.; H. C. Bumpus is Mgr. University.

+Milwaukee, Wis.—A. Hood, Arch., awarded the general contract for the construction of a $60,000 apartment house for the Milwaukee Realty & Building Co. at Grand Ave. and 22d St. to CON. RAULF, JR., CONSTRUCTION CO., Patton Bldg., Milwaukee, Wis.

W. W. Maxwell has completed plans for the proposed school of trades for boys, to cost $250,000 and be located at Greenbush and Hanover Sts. It will be 300 × 150 ft. in size, of reinforced concrete construction, with pressed brick facings and stone embellishments, and three stories high. Frank M. Harbach is Secy., Bd. of Educ. after Aug. 1.

A 16-family apartment house will be erected at 22d St. and Grand Ave. by the Milwaukee Realty Co. The plans have been submitted to the building inspector. It is estimated that the cost of the structure will be not less than $75,000.

Shawano, Wis.—Bids will be received by the Asylum Building Committee until Aug. 22 for furnishing material and erecting an asylum building and boiler house and laundry near Shawano. O. O. Wiegand is County Clk.

+Belle Plaine, Iowa.—Work of tearing down the old high school building is making rapid progress, and room for the new high school will soon be cleared. The new building will cost at least $50,000. There will be over $5,000 worth of old material in the old building that can be used again in the new building. JAMES PARK, of this city, has the contract for the high school building.

Mason City, Iowa.—Plans for the erection of a fire station, to be solid concrete, two stories high and 66 × 44 ft., have been submitted to the City Council for its approval. The building will be located at Fifth St. and is to be fireproof. The first floor is reserved for the fire apparatus and the horses and the second for the firemen's apartments, baths and gymnasium. The structure will cost $50,000 or $75,000.

Morrison, Iowa.—Bids will be received until Aug. 5 by E. H. Reimers, Secy. Bd. of Educ., for constructing a school.

Moorhead, Minn.—At the recent election of the Moorhead independent school district it was decided by a large majority vote to erect a new schoolhouse to cost $75,000. The school is to be located on the site of the old one and work will be commenced as soon as plans are completed for the financing of the proposition. It is planned to build the new building in a fireproof manner and to have a gymnasium, shower baths, and modern equipments installed.

Topeka, Kan.—Bids will be received until Aug. 4 by the Rev. Francis Henry, 228 Harrison St., for the construction of a parochial school. John F. Stanton, Arch., 835 Kansas Ave., prepared the plans.

Hastings, Neb.—T. R. Kimball has prepared plans for a $150,000 hospital for W. H. Lanning, at Hastings, Neb.

Lincoln, Neb.—Plans are being prepared for the proposed Lincoln high school. The cost will be approximately $265,000.

Rock Springs, Wyo.—Bids were received as folows on July 28, by James Knox Taylor, Superv. Arch., Treasury, Washington, D. C., for the construction of a U. S. post-office at Rock Springs, Wyo.: (a) limestone, (b) sandstone: North Western Construction Co., Kearney, Neb., (a) $77,000, (b) $80,000; George Hinchcliff Co., Chicago, (a) $70,900, (b) $70,400; Dieter & Wenzel Construction Co., Wichita, Kan., (a) $66,500, (b) $67,350; William Simpson Co., Denver, Colo., (a) $80,029, (b) $79,676; Campbell Bldg. Co., Salt Lake City, Utah, (a) $70,887, (b) $70,487; J. H. Wiese, South Omaha, Neb., (a) $71,941, (b) $73,441.

+Kansas City, Mo.—The contract has been awarded by the Atchison, Topeka & Santa Fe R. R. to the GEORGE A. FULLER, CO., 111 Broadway, New York City, for the construction of a station at Kansas City.

Liberty, Mo.—Bids will be received by the Board of Trustees, Odd Fellows' Home, Liberty, for constructing addition to the Old Folks' Home, until Aug. 4.

Pine Bluff, Ark.—Arch. George R. Mann, of Little Rock, has prepared final plans for the $250,000 hotel which is to be erected at Fifth and Main Sts. in this city. It is expected that the contract will be let soon.

+Aspermont, Tex.—R. L. WRIGHT of Dallas was awarded the contract for the erection of the new county court house here. The building will cost $47,630 and it is to be finished in eight months.

Brenham, Tex.—Bids will be received by A. L. Niebuhr, Secy. Bd. of Trust., until Aug. 3 for erecting a brick church.

Bryan, Tex.—The Commercial Club is promoting the establishment here of a canning factory, cold storage plant and creamery.

Houston, Tex.—A young women's home, to cost $200,000, will be erected here.

Darlington, Okla.—Bids will be received by the Commissioner of Indian Affairs, Washington, D. C., until Aug. 14, for a brick dormitory at Cheyenne and Arapaho school.

Oklahoma City, Okla.—B. R. Harrington and Lee Thompson have made plans for a five-story reinforced concrete and brick business block to be erected at 214-218 West Fourth St. as soon as the completion of the new federal building is in sight. The building will cost probably $75,000. The Sadler Investment Co. will also erect a five-story structure at Third and Robinson Sts. and W. F. Harn has plans for a five-story building to be built across from the new post office on Third St. as soon as that building is finished.

Coalville, Utah.—The Board of School Trustees will receive bids until Aug. 4 for constructing a 10-room school. William J. Wright is [illegible]. Plans were prepared by J. E. Allen, Arch., Knight Bldg., Provo.

+Phoenix, Ariz.—OLSEN & GRAF, Phoenix, were awarded the general contract at $123,684 for the construction of a polytechnic high school group from plans by Arch. Norman F. Marsh, Broadway Central Bldg., Los Angeles, Cal. The contract for the heating and ventilating was awarded to the MACHINERY & ELECTRICAL CO., of Los Angeles, Cal., at $11,97[illegible], and the electrical work contract was awarded to the C. E. COOK ELECTRICAL CO., of Los Angeles, Cal., at $[illegible]. The bids received on the general contract were as follows: (a) auditorium, (b) domestic science, (c) science, (d) shop, (e) gymnasium: Olsen & Graf, (a) $39,500, (b) $53,024, (c) $37,138, (d) $6,944, (e) $7,078; total, $123,684. C. W. Bell, (a) $38,759, (b) $33,684, (c) $[illegible],348, (d) $6,727, (e) $7,840; total, $[illegible],354. James Stewart & Co., (a) $42,1[illegible], (b) $34,575, (c) $38,940, (d) $7,198, (e) $7,990; total, $130,860. James Wadin, (a) $39,908, (b) $37,746, (c) $39,646, (d) $7,551, (e) $6,149; total, $131,000. Kei[illegible] & Odham, (a) $41,959, (b) $38,376, (c) $38,580, (d) $7,363, (e) $7,083; total, $133,361.

Portland, Ore.—A reinforced concrete building, fully fireproof, is being constructed at the corner of East Water and Hawthorne Sts. for the Portland Railway, Light & Power Co., which is to be used as a combination warehouse and clubhouse for the corporation's employes. The building will cost between $60,000 and $70,000.

Anaheim, Cal.—Active work of construction of the group of high school buildings has been commenced, and the contractor expects to have them ready for occupancy by about the middle of September. The buildings will be five in number and will cost about $65,000.

Los Angeles, Cal.—Plans are being prepared for a 5-story, class B apartment house to be erected at the northwest corner of Lake and Sixth St., at an estimated cost of $140,000. J. W. Chalmers is designing the structure, which will be erected by Alonzo Lee Hill, 984 Menlo Ave. The building will contain 200 rooms. Construction work probably will be commenced early in September.

Los Angeles, Cal.—Construction work will be started in Ventura County by Senator Thomas R. Bard. The cost is $60,000. The style of architecture is that known as Italian villa, with tile roof. The house will have two stories, with an attic and basement, and will contain about 25 rooms. It will cover a ground space of 81 × 86 feet. The interior will be finished in walnut and mahogany. On the north side of the house will be a pergola enclosing a garden. The north, east and south sides of the grounds will be terraced.

San Diego, Cal.—Bids will be received until Aug. 9 by the Board of Supervisors for erecting a 3-story reinforced concrete building on the court house grounds.

Bakersfield, Cal.—The County Board of Supervisors will issue a call in two months for architects to submit plans for a county jail building to care for 175 prisoners, and to cost $150,000.

+Windsor, Ont.—Geo. D. Mason, 80 Griswold St., Detroit, Mich., has awarded the general contract for a 5-story and basement store building, 90 × 190, for D. M. Ferry & Co., Brush and Monroe Sts., Detroit, Mich. General contract let to the BISHOP CONSTRUCTION CO., of Toronto, Ont. Cost $60,000.

Tilbury, Ont.—Bids will be received by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., until Aug. 8, for erecting a public building.

WATER SUPPLY—IRRIGATION.

(+*Denotes a contract awarded.*)

***Fort Levett** (Portland post-office), **Me.**—Bids will be received until 11 a. m., Aug. 15, by the Constructing Quartermaster, U. S. A., Portland, for the construction of a pump house, well shelters, concrete reservoir, and tank; and installation of pumping machinery, piping, etc., at Fort Levett.

***Athol, Mass.**—We are officially advised that bids were received as follows on Aug. 1 by the city for furnishing 320 tons of 12-in. c.-i. pipe: (a) straight pipe per ton; (b) specials, per cwt.: U. S. Cast Iron Pipe & Foundry Co., 71 Broadway, New York, (a) $21.95, (b) $50 per ton; Florence Iron Works, (a) $22.15, (b) $2.50 per cwt.; John Fox & Co., (a) $22.75, (b) $2.50; Standard Cast Iron Pipe & Foundry Co., (a) $22.70, (b) $2.45; Chas. Millar Son Co., (a) $23.40, (b) $2.50; Warren Foundry & Machine Co., (a) $24.40, (b) $2.30. James L. Tighe is Engr., Holyoke, Mass.

+Boston, Mass.—The contract for laying 3,000 ft. of 12-in. pipe and under in eleven streets in various sections of the city has been awarded by Louis K. Rourke, Comr. Pub. Wks., to MICHAEL DE SISTO & CO., at 45 cts.

Bids will be received until Aug. 4 by the Public Works Department for relaying water pipes in Ericsson, Water and Fulton Sts., Dorchester. Louis K. Rourke is Comr. Pub. Wks.

***Lawrence, Mass.**—Bids will be received by the Water Board until 3 p. m., Aug. 23, for a turbine-driven centrifugal pump and condenser of 3,000,000 gallons capacity in 24 hours. Specifications can be obtained at the office of the Water Board, Oak St., by intending bidders. Morris Knowles is Consult. Engr. Bd.

Salem, Mass.—It is proposed to augment the present water supply by taking water from Norwood and Beaver Ponds and Miles Brook. A ground water supply in Wenham Swamp is also under investigation.

Malden, Mass.—A high-pressure water service is proposed and will soon be begun from Malden Centre to Edgeworth to furnish extra protection for the rubber works. Charles T. Hall is Chn. Water Bd.

***Geneva, N. Y.**—Bids will be received by the Board of Public Works until 10 a. m., Aug. 15, for the construction of a slow sand filter and a concrete reservoir. The slow sand filter will comprise the placing of pipes, gates and other appurtenances, the construction of an operating house and about 8,700 cu. yds. of earth excavation, 3,000 cu. yds. of concrete masonry, 6,300 lbs. of steel reinforcing and 2,800 cu. yds. of filter gravel and sand. The concrete reservoir will comprise about 9,000 cu. yds. of earth excavation, 2,000 cu. yds. of concrete masonry and the placing of pipes, gates, etc. Plans and specifications may be seen at the office of the Board of Public Works, or at the office of William S. Johnson, Engr., 101 Tremont St., Boston, Mass. C. T. Church is Supt. Bd.

Buffalo, N. Y.—C. H. Everitt, White Bldg., Buffalo, has submitted the lowest bid to Francis G. Ward, Comr. Pub. Wks., for the superstructure of the new intake pier in Emerald Channel, at $43,410.

+Herkimer, N. Y.—The Municipal Commission has awarded a contract to I. P. CRIM of Richfield Springs to drill four wells for the public water system of the village.

Ithaca, N. Y.—Cornell University is planning to construct a new water supply system from Fall Creek. E. L. Williams is Treas.

Freeport, (L. I.), N. Y.—Bids will be received until 8 p. m., Aug. 3, by the Board of Village Trustees, for furnishing 7,500 ft. of 6-in. c.-i. bell and spigot water pipe and 6,000 ft. of 4-in. c.-i. bell and spigot water pipe, with hydrants, gates, gate boxes, crosses, tees, etc. S. P. Shea is Clk.

***New York, N. Y.**—We are officially advised that William F. Donovan & Charles Crawford were the low bidders on Aug. 1, for Contract 87, for the construction of the Brooklyn conduit, a portion of the city pipe lines of Catskill Aqueduct, in the City Aqueduct Department, and extending from the junction of Flatbush Ave. and Schermerhorn St., in the Borough of Brooklyn, along Third Ave., Baltic St., Park Pl., Sixth Ave., 24th St., and Fifth Ave. to 36th St., at $366,015. The work to be done includes furnishing and laying of about 17,200 ft. of 66-in. steel pipe, a 66-in. Venturi meter, valves and other appurtenances, together with maintenance for one year. Bids were opened by the Board of Water Supply.

New York, N. Y.—Bids will be received until 2 p. m., Aug. 9, by Henry S. Thompson, Comr. Water Supply, Gas and Electricity for furnishing, delivering and installing a forced draft system with all appurtenances complete, in the 98th St. pumping station, Boro. Manhattan; for furnishing the materials and labor required for plumbing, road building, masonry, grading, fencing, etc., at the various pumping stations.

Hawthorne, N. J.—The citizens on July 18 voted to construct a municipal water-works system. William Ferguson & Son, of Paterson, N. J., are Engrs.

Bristol, Pa.—The City Council has decided to install a fire-fighting water-tank. Estimated cost, $8,000.

Pittsburg, Pa.—Bids will be received by the H. J. Heinz Co., 1062 Main St., North Side, Pittsburg, it is reported, until Aug. 5, for constructing a concrete reservoir of 800,000 gallons capacity on River Ave. The approximate quantities are: Concrete piles, 12,000 lin. ft.; reinforcing steel, 175,000 lbs.; c.-i. and steel, 3,500 lbs.; c.-i. pipe and specials, 14,000 lbs. The water for this reservoir will be supplied by wells. It is reported that a filtration plant will also be built. The reservoir will be covered and will cost about $50,000.

Unionville, Pa.—The borough has voted in favor of spending $5,000 for the installation of a water plant.

***York, Pa.**—Bids for constructing an earth dam and appurtenances across the east branch of Codorus Creek, addressed to John F. Sprenkel, Gen. Mgr., York Water Co., will be received at the office of the York Water Co., York, until 2 p. m., Aug. 22. The work is to be done in accordance with plans and specifications on file in the company's office and in the office of George W. Fuller, Engr., 170 Broadway, New York. The principal quantities are approximately as follows: Earthwork, 71,000 cu. yds.; rock excavation, 200 cu. yds.; concrete, 6,000 cu. yds.; broken stone, 25,500 cu. yds.; slope paving, 3,500 cu. yds.

+Lancaster, Pa.—The contract was awarded on July 25 for the construction of a dam to GEORGE ROCKWELL by the Water Commission, at $8,142.

Baltimore, Md.—The Mayor's Advisory Committee, it is reported, will construct a new dam, with a crest elevation of 192 ft., one-half mile up the river above Loch Raven. The dam will be erected upon a foundation to be carried to a 237-ft. elevation, and will have a capacity of 3,000,000,000 gallons. Estimated cost, $1,500,000.

Clarksburg, W. Va.—Bids will be received by the Water-Works and Sewerage Board at the office of Scott G. Highland, Secy., until noon, Aug. 21, for furnishing all material and constructing a concrete storage dam on the West Fork River at Lynch's Mines. Plans and specifications may be obtained at the office of the Secretary and of Hering & Fuller, Engrs., 170 Broadway, New York.

+*Clarksburg, W. Va.—Bids were received by the Water Works and Sewerage Board at the office of Scott G. Highland, Secy., on July 24, for furnishing and erecting two 200-HP. water tube boilers complete including 80-ft. steel stack, steam and water connections and other appurtenances. The bids follow: A. D. Granger Co., $9,943. Henry Vogt Machine Co., $7,166 and $6,671. W. B. Osborn, $6,993; Heine Safety Boiler Co., $6,490; E. KEELER CO., 50 Church St., New York, $6,471 (awarded contract.)

+High Point, N. C.—The contract has been awarded to GLAMORGAN, PIPE & FOUNDRY CO., of Lynchburg, Va., by the city for furnishing material for the water extensions. Bids were opened on July 10.

+Dyer, Tenn.—Contracts for the construction of a water-works system have been awarded by the city as follows: Laying pipe, to ROYER PIPE CO.; tank, to DES MOINES BRIDGE & IRON CO., Des Moines, Iowa. W. A. Henson is City Clk.

Lakeland, Ky.—Bids will be received until Aug 8 by the Kentucky State Board of Control for Charitable Institutions, at the Central Kentucky Asylum for the insane, Lakeland, for constructing and erecting an elevated steel tank. J. T. Neighbors, is Engr., Lakeland.

Columbus, Ohio.—Bids will be received by H. S. Holton, Dir. Pub. Ser., until Aug. 15 for 250 tons of c.-i. pipe delivered on the line of work for use in the Water-Works Department.

Limo, Ohio.—Bids will be received by the Director of Public Service until noon, Aug. 3, for furnishing about 1,440 lin. ft. of 24-in. c. i. water pipe, and one 24-in. valve, together with all lead and hemp and other material and labor necessary for delivering the pipe from cars and excavating a trench and laying pipe in a conduit line connecting the new reservoir with the old water-works reservoir.

St. Marys, Ohio.—The W. K. Palmer Co., Consult. Engrs., Dwight Bldg., Kansas City, Mo., has been engaged in connection with the municipal electric light and water plant and system of the city.

Crown Point, Ind.—Bids will be received until Aug. 7 by the City Clerk for 1,200 ft. of 4-in. water main extension. F. L. Knight & Son, are Engrs., Crown Point.

Fort Wayne, Ind.—John F. King, Arch., 115 East Wayne St., is preparing plans for the construction of an addition to No. 3 pumping station at the end of South Broadway.

Richmond, Ind.—The following bids were received on July 14 for furnishing and erecting two centrifugal pumps, piping and water meters: Sydnor Pump & Well Co., $5,759; W. P. Longworth & Co., $6,590; Smith-Courtney Co., $4,491; Dravo-Doyle Co., city specifications, $6,499; alternate bid on own specifications, $5,573; J. L. Lindsay, Inc., $5,170.

***Flint, Mich.**—Bids were received as follows by the Board of Water Commissioners on July 20 for constructing a pumping station and filter plant, including intake, suction well and all building and filter equipment for eight 1,000,000-gallon filters, with sedimentation basins, clear well, etc.: (a) Excavation and grading; (b) concrete; (c) brickwork; (d) steel work; (e) carpenter and mill work; (f) roof; (g) galvanized iron and sheet metal; (h) stone-work; (i) plastering; (j) heating; (k) drainage; (l) intake; (m) suction-well; (n) intake conduit; (o) lighting; (p) sluice-gates; (q) piping; (r) filter equipment; (s) chemical devices; (t) crane; (u) stack; (v) extra excavation, 50 cu. yds.; (w) extra concrete, 20 cu. yds.; (x) days to complete: Norwood Engineering Co., Florence, Mass., (a) $13,240, (b) $47,970, (c) $7,150, (d) $3,400, (e) $4,400. (f) $650. (g) $465 (h) $2,900, (i) $200, (j) $890, (k) $3,950, (l) $1,200, (m) $1,340, (n) $6,000, (o) $725, (p) $2,650. (q) $2,400, (r) $34,600, (s)$5,950, (t) $3,100, (u) $3,620, (v) $75, (w) $142, (x) 520 days; Roberts Filter Mfg. Co., Philadelphia, Pa., (a) $14,200, (b) $54,000, (c) $7,350, (d) $3,460, (e) $4,340, (f) $680, (g) $490, (h) $2,600, (i) $120, (j) $1,430, (k) $3,050, (l) $1,360, (m) $440, (n) $2,616, (o) $584, (p) $2,875, (q) $2,856, (r) $33,248, (s) $4,650, (t) $3,000, (u) $3,600, (v) $85, (w) $375, (x) 600 days; Pittsburg Filter Mfg. Co., Pittsburg, Pa., (a) $12,800, (b) $52,800, (c) $6,500, (d) $2,850, (e) $4,700, (f) $575. (g) $500, (h) $3,000, (i) $120, (j) $925, (k) $3,700, (l) $1,250, (m) $1,350, (n) $6,280, (o) $800, (p) $2,400, (q) $2,000, (r) $31,000, (s) $3,100, (t) $2,900, (u) $3,300, (v) $75, (w) $170, (x) 500 days; New York Cont. Jewel Filtration Co., New York, (a) $12,950, (b) $48,000 (c) $7,800, (d) $3,275, (e) $4,100, (f) $600, (g) $600, (h) $2,810, (i) $150, (j) $1,585, (k) $4,940, (l) $1,270, (m) $1,400, (n) $5,750, (o) $925, (p) $2,591, (q) $2,375, (r) $32,250, (s) $3,900, (t) $3,050, (u) $3,600, (v) $75, (w) $195, (x) 510 days; W. W. Hatch & Sons Co., Detroit, Mich., (a) $7,394, (b) $58,044, (v) $50, (w) $200, (x) 120 days; Whiting Foundry Equipment Co., Harvey, Ill., (t) $1,590; Advance Machine Works, Walkersville, Ont., (t) $1,620; Toledo Bridge & Crane Co., Toledo, Ohio, (t) $2,306; The M. W. Kellogg Co., New York, (u) $2,960; H. R. Heinicke, New York, (u) $2,930; The Weber Chimney Co., Chicago, Ill., (u) $2,150; Alphons Custodis Chimney Construction Co., New York, (u) $3,600.

Bement, Ill.—We are officially advised that the city will soon be in the market for about 10,000 ft. of 4 and 6-in. water pipe and specials, with valves and fire hydrants. W. J. Day, C. E., is Pres. Village Bd.

+Herrin, Ill.—We are officially advised that the contract has been awarded by the city to the H. H. HALL CONSTRUCTION CO., of East St. Louis, Ill., for constructing a 48,000,000-gallon reservoir, pumping plant, 100,000-gallon steel tank on 50-ft. steel tower and 11,100 ft. of 12-in. water pipe, at $42,072. Bids were opened on July 26. R. L. Adams is City Engr.

Pana, Ill.—Bids will be received by Harry Stanton, City Clk., until Aug. 17 for furnishing material and improving the water-works in seven sections. Bids will be received on all or any of the seven sections as follows: (1) reservoir dam and pump tower; (2) water pipe and transmission line; (3) pumping machinery; (4) mechanical filter plant; (5) gas-power electric plant; (6) power house; (7) steam boilers, engine and generator. Arthur Geisler, of Dayton, Ohio, is Engr.

Rock Island, Ill.—Bids are being asked for two 72-in. x 18-ft. horizontal tubular boilers at the water-works pumping station. Chas. Wilson is Supt. W.Wks.

+Springfield, Ill.—Bids were received as follows on July 17 by the city for the erection of the new 10,000,000-gallon pump at the water-works station on the Sangamon River: HOLLY MFG. CO., Roberts Ave. and Clinton St., Buffalo, N. Y., $49,769 (awarded contract); Allis-Chalmers Co., Milwaukee, Wis., $65,675.

Appleton, Wis.—The city is considering the construction of a new water-works system.

Lacrosse, Wis.—The Common Council has voted to employ A. T. Maltby, C. E., Chicago, Ill., to prepare plans and specifications for the construction of the proposed new artesian well system of water supply. Estimated cost, $150,000.

Manitowoc, Wis.—The Council has authorized a bond issue of $230,000, it is reported, for the purchase of the water-works plant.

Albia, Iowa.—The Water Main Extension Committee of the City Council is considering the construction of new water mains for fire protection.

Anamosa, Iowa.—Bids will be received until noon, Aug. 7, by the county, for the erection of a tower and water tank at the Jones County farm of either wood or steel construction. Louis Gardner is City Audr.

Osage, Iowa.—A. S. Wright, City Clk., will receive bids until Sept. 1 for drilling and casing a deep well.

Roland, Iowa.—J. A. Christian, City Clk., will receive bids until 3 p. m., Aug. 15, for the construction of a water-works system. The Ames Engineering Co. is Engr., Ames, Iowa.

+Council Bluffs, Iowa.—The Water Board has awarded the contract for 350 tons of c.-i. pipe to the U. S. CAST-IRON PIPE & FOUNDRY CO., Rookery Bldg., Chicago, Ill., at $25.45 per ton and for specials at 21 cts. per lb. The contract for the equipment for the installation of the proposed water-works extensions was let to the LUDLOW VALVE MFG. CO., of Troy, N. Y.

+Williams, Iowa.—The contract for erection of a steel water tank with a capacity of 40,000 gallons on a tower, 75 ft. high, has been awarded to the DES MOINES BRIDGE & IRON CO., of Des Moines, Iowa.

Dawson, Minn.—Plans are being prepared for the construction of a municipal water-works system here.

+Easton, Minn.—We are officially advised that the village has awarded the contract to the DES MOINES BRIDGE & IRON CO., of Des Moines, Iowa, for the construction of a 75,000-gallon steel tank on a 100-ft. tower, at $5,690.

Columbia Heights, Minn.—Bids will be received by C. N. Dahl, Village Clk., until 6 p. m., Aug. 15, for the construction of a 6-in. water main in Madison St., from 42d to 43d Aves.

Kiester, Minn.—H. F. Wittmer, Village Recdr, will receive bids until 8 p. m., Aug. 7, for the construction of water mains.

St. Clair, Minn.—Bids will be received by Charles O'Connor, Village Recdr., until 7.30 p. m., Aug. 10, for the construction of a water-works system, including about 2,400 ft. of 8 and 6-in. mains.

Coffeyville, Kan.—We are officially advised that the proposition to issue $125,000 of bonds for the construction of a filtration plant and extension to water-works system was defeated on July 25. Noted on June 22.

Hill City, Kan.—We are officially advised that the J. S. Worley Co., Reliance Bldg., Kansas City, Mo., is preparginp lans for the construction of a water and light plant here.

Waterville, Kan.—The J. S. Worley Co., Reliance Bldg., Kansas City, Mo., we are officially advised, is preparing plans for the construction of a water and light plant here.

La Cygne, Kan.—Plans are being prepared by the J. S. Worley Co., Reliance Bldg., Kansas City, Mo., for a water and light plant to cost $30,000. Bids will be received at La Cygne about the middle of August.

Syracuse, Kan.—The citizens on July 14 voted in favor of issuing $30,000 of bonds for the construction of a water-works system.

Wichita, Kan.—We are officially advised that E. B. Black, Vice-Pres. of the J. S. Worley Co., Consult. Engrs., Reliance Bldg., Kansas City, Mo., has been engaged by the city to bring the 1910 appraisal of the water-works up to date and prepare an estimate of cost of a new municipal plant. Noted on July 27.

Crawford, Neb.—The city will ask for bids for extending the water-works, changing to gravity system, the work requiring 37,000 ft. of wooden pipe line. Estimated cost, $24,000. H. D. Mead, Chedron, Neb.; J. S. Peck, Deadwood, S. Dak., and F. H. Whiting, Denver, Colo., are Engrs. Clyde J. Hornsby is City Clk.

Gordon, Neb.—Bids will be received until Aug. 10 by H. D. Huntington, Village Clk., for the extensions of the water mains.

Louisville, Neb.—Plans are being prepared for the installation of a water-works system for the city.

Wymore, Neb.—Bids will be received by F. M. Meek, City Clk., until 8 p. m., Aug. 9, for laying approximately 13,000 ft. of 4-in. pipe. Estimated cost, $6,000.

Wynot, Neb.—The Village Clerk will receive bids until 4 p. m., Aug. 17, for the construction of a water-works system. Arnold Koenig is Engr., Omaha, Neb.

Fargo, N. Dak.—Bids will be received until Aug. 7 by E. R. Orchard, City Audr., for furnishing and laying a 6-in. water main in Eighth Ave.

+Ipswich, S. Dak—The contract for the construction of a water-works system and fire-hall here has been awarded to ROBERTS & FEW, of Brookings, S. Dak., at about $20,000.

Belton, Mont.—Bids will be received by the Department of The Interior, Washington, D. C., until 2 p. m., Aug. 16, for the installation of a water system in connection with four administration buildings in Glacier National Park, Belton.

Moore, Mont.—The citizens have voted to issue bonds for the construction of water-works. Thomas S. Shepperd, of Denver, Colo., is Engr.

St. Ignatius, Mont.—Bids will be received until 3 p. m., Aug. 25, by the U. S. Reclamation Service, St. Ignatius, for the construction of the North, Middle and South Pablo dams and about 8½ miles of adjacent canals, involving the placing of about 234,000 cu. yds. of earth embankment in the dams and the excavation of about 200,000 cu. yds. of material from canals. The work is located from two to five miles south of Polson, Mont., on the Flathead Project. For particulars address the U. S. Reclamation Service, Washington, D. C.; Helena, Mont., or St. Ignatius, Mont. F. H. Newell is Dir.

Huntley, Mont.—Bids will be received until 3 p. m., Sept. 1, by the U. S. Reclamation Service, Huntley, for the construction of earthwork and structures, extension of the Main and High Line canals, Huntley Project and the lateral systems in the vicinity, respectively, of Bull Mountain and Anita, Mont. For particulars address the U. S. Reclamation Service, Huntley; Helena, Mont., or Washington, D. C. F. H. Newell is Dir.

Kansas City, Mo.—Bids were received by the Purchasing Agent on July 12 for the design, manufacture and installation of a battery of water tube boilers. All bids, we are officially advised, have been rejected. New bids will be asked. E. B. Harrington is Secy. Bd. Fire and Water Comrs.

Dallas, Tex.—The contract for sinking five new wells has been awarded by the City Commissioners to SHARP & CO., of Dallas, and FAUCETT & HALL, of Corsicana, at $2.75 per ft. The contract for supplying the city with 400 tons of 6-in. water pipe at $26.70 per ton and $50 for specials has been awarded to the U. S. CAST-IRON PIPE & FOUNDRY CO.

Henrietta, Tex.—The citizens have voted to issue $18,000 of bonds for constructing a dam on Little Wichita River north of the town and for constructing a pumping station.

Delvale, Tex.—Charles Jones, of Austin, is arranging to construct a 15-ft. dam across the Colorado River near Delvale, this county, and to install an irrigation system that wil water about 8,000 acres of land.

Greenville, Tex.—The citizens have voted to issue $85,000 of bonds for installing improvements to the water-works system. This amount will be added to the recent bond issue of $50,000, voted for the same purpose. It is the purpose of the city to purchase 250 acres of ground on Horseshoe Creek, situated one mile east of the present water-works plant, and construct an earthen reservoir of concrete lining. A pipe line will be laid from the reservoir to the present standpipe.

Harlingen, Tex.—Surveys are being made for the proposed extension of the irrigating canal system of the Harlingen Land and Water Co. The main canal will be extended five miles and several miles of laterals will also be excavated. The work will be done by means of dredges.

Mission, Tex.—The citizens have voted in favor of issuing $15,000 of bonds for the installation of a water-works plant and distributing system.

Waco, Tex.—The City Council is considering issuing $350,000 of bonds for improving the municipal water-works plant and distributing system.

***Muskogee, Okla.**—We are officially advised that bids were received as follows on July 25 by the City Council for the construction of Agency Hill Reservoir, a reinforced-concrete circular structure, about 200 ft. in diameter, with a maximum depth of 31 ft. and a storage capasity of 6,000,000 gallons. Engineer's estimate, $53,646. H. B. Nelson, $46,991; Hoff & Williams, $66,180; the Holmboe Co., $49,377; F. P. McCormick, $62,558; Heman Construction Co., $61,744; Rooney & Culp, $48,022. Alexander Potter is Consult. Engr., 114 Liberty St., New York.

***Muskogee, Okla.**—Bids will be received by the City Council until 10 a. m., Aug. 29, for furnishing and erecting the following pumping machinery: One 6,000,000 low lift centrifugal pump, one 6,000,000 high lift centrifugal pump, one 3,000,000 high lift centrifugal pump. Bids will be received alternatively for direct connection with electric motors and steam turbines. Specifications can be procured at the office of T. P. Clonts, City Engr., or at the office of Alexander Potter, Consult. Engr., 114 Liberty St., New York, on or after Aug. 10. All bids are to be filed with Charles Wheeler, Jr., City Clk.

Cherokee, Okla.—Bids will be received by the City Council until 8 p. m., Aug. 8, for the extension of almost 1,600 ft. of 6-in. c.-i. water main. William Shardlow is City Clk.

Pawhuska, Okla.—The citizens have voted to issue $60,000 of bonds for the extension of the water-works system and electric light plant. Noted on June 15.

Colorado Springs, Colo.—The CENTRAL CONSTRUCTION CO. has been awarded the contract, it is reported, for the construction of two 450,000,000-gallon reservoirs by the Northfield Land & Water Co.

Pueblo, Colo.—The Trustees of the North Side Water Works have awarded to the ROBERTS FILTER CO., of Darby, Philadelphia, Pa., a contract for the installation of a filter plant of 50,000,000 gallons. Estimated cost, about $251,800.

+Rockland, Colo.—The FOX & SMITH CONSTRUCTION CO., it is reported, has been awarded the contract for constructing the new Rockvale reservoir, 150 × 75 ft. and 14 ft. high, with cement bottom and top.

Tucumcari, N. Mex.—The city has decided to install 100 additional fire hydrants.

Challis, Idaho.—The citizens have voted to issue bonds for the construction of a municipal water-works system.

Fallon, Nev.—The City Council will receive bids until 8 p. m., Aug. 22, for the construction of two pumping plants for the city of Fallon. W. H. Reeves is Clk.

Centralia, Wash.—The Council has granted to the Washington-Oregon Corporation the authority to maintain water mains across public streets in the city.

+Seattle, Wash.—The Board of Public Works has awarded the contract to BURTON STARE for supplying water meters, at $40,928.

Astoria, Ore.—The Board of Commissioners has decided to put in a dam at the head works for the purpose of increasing the storage capacity of the water system and has instructed the City Engineer to prepare and submit plans.

Marshfield, Ore.—Thomas P. Nolan, of Omaha, Neb., it is reported, will purchase for $150,000 the Coos Bay Water Co. from Flanagan & Bennett. If granted a franchise Mr. Nolan will build a new reservoir and improve the plant.

Bridgeport, Cal.—Bids will be received by George Delury, Clk. Bd. of Supervisors, until Aug. 6 for the construction and installation of a complete water system for use of the county court house at Bridgeport.

Irvington, Cal.—The fire system will be improved by the installation of a 75,000-gallon water tank. A 6-in. pipe will be run to the water main on First St.

Lindsay, Cal.—Bids will be received until Aug. 8 by the city for the construction of improvements to the water system. Estimated cost, $15,000. Haviland & Tibbetts are Consult. Engrs., San Francisco, Cal. W. H. Mack is City Clk. Noted on July 20.

Los Angeles, Cal.—The Los Angeles Gas & Electric Corporation has awarded a contract to the WESTERN PIPE & STEEL CO., of California, 1758 North Broadway, Los Angeles, for the construction of two 12-in. and 14-in. suction pipes and two 12-in. and 14-in. discharge pipes and one 18-in. exhaust pipe at Ducommun and Centre Sts., at about $6,250.

The County Board of Supervisors of Los Angeles County has granted a franchise to the Valley Water Co. to lay water pipes in La Canada Valley.

The Covina Irrigating Co. has been granted a franchise to lay a 28-in. steel water pipe line along the San Bernardino Road.

+Maricopa, Cal.—J. J. Magy, of the Pine Mountain Water Co. has awarded the contract to FRENCH BROS. of Taft, Cal., for the construction of an 8-in. water pipe line from the Cuyama Valley to Maricopa, a distance of 40 miles.

Cottonwood, Cal.—The interests of the Piety Hill Mining Co., of Happy Valley, have been purchased by the Happy Valley Land & Water Co. The first work planned by the purchasing company is the construction of a concrete dam at a cost of $30,000 for reservoir purposes.

***Dorris, Cal.**—Bids will be received by Fred Chapman, Town Clk., until 8 p. m., Aug. 25, for constructing the Dorris water-works system. Bids are to be submitted as follows: (1) To build the system complete with machinery for gasoline power; (2) to build the system complete with machinery for electric power. (Power to be furnished by the Siskiyou Light & Power Co.). The above propositions do not include the digging and construction of the well for which there must be a separate bid.

Morgan Hill, Cal.—Bids will be received until Aug. 10 by the town for the construction of a water-works system from the plans of H. B. Fisher, of San Jose. Estimated cost, about $13,000.

Pasadena, Cal.—The City Council has taken steps to map out a municipal water distributing system. A cement reservoir will probably be constructed. J. S. Van Ornum is City Engr.

Porterville, Cal.—The citizens have voted to issue $45,000 of bonds for the extension of the water-works system.

Sacramento, Cal.—It is reported that the East Sacramento Water Co. will spend $100,000 to extend the East Sacramento water system. H. A. McClelland is Pres.

London, Ont.—Bids will be received until noon, Aug. 12 by the city for about 3,300 ft. of 18-in. and 1,600 ft. of 12-in. c.-i. pipe, and for a quantity of valves and specials. H. J. Glaubitz is Gen. Supt. W-Wks. and Elec. Dept.

North Bay, Ont.—Bids will received until Aug. 5 by T. N. Colgan, Comr. of Works, for four contracts as follows: Contract A, laying approximately 46,945 lin. ft. of water mains, placing valves, valve boxes, hydrants, etc.; Contract B, laying approximately 500 lin. ft. of 16-in. steel intake pipe, the construction of concrete pump well on lake shore and the necessary connections to two pumps; Contract C, supplying approximately 15,500 lin. ft. of 14-in. pipe; 500 lin. ft. 16-in. steel pipe, 2,550 lin. ft. 10-in. pipe; 27,745 lin. ft. 6-in. pipe, 1,100 lin. ft. 4-in. pipe, and the necessary tees, crosses, curves, etc.; Contract D, supplying approximately 32 hydrants, eleven 14-in. gate valves and valve boxes, five 10-in. gate valves and valve boxes, 40 6-in. gate valves and valve boxes, three 4-in. gate valves and valve boxes. Separate bids are desired for the supply of and laying of steel pipe, c.-i. pipe and wood stave pipe, in Contracts "A" and "C." Plans and specifications may be seen at the office of the Commissioner of Works.

Toronto, Ont.—Bids will be received by G. R. Geary, Mayor and Chn. Bd. of Control, until noon Aug. 8 for the construction and supply of 20-in. special castings, and 12-in. and 20-in. valves for the Water-works Department. Plans and specifications may be seen and forms of proposal obtained from the Waterworks Department at the office of C. H. Rust, City Engr.

The contract for laying the new intake pipe has been awarded by the City to ROGER MILLER & CO., at $259,900.

Moose Jaw, Sask.—Bids will be received by the city, addressed to W. F. Heal, City Clk., until 8.30 p. m., Aug. 14, for laying approximately 16,885 lin. ft. of water and sewer extensions and for the supply of all c.-i. and vitrified tile pipe and specials, etc. Plans and specifications for the construction work may be seen at the office of J. M. Wilson, City Engr., and specifications for the supply of materials may be obtained from his office upon application.

Regina, Sask.—Bids will be received by the City Commissioners until noon, Aug. 4, for the following: (a) trenching, laying and backfilling for approximately 11,200 lin. ft. of 18-in. steel pipe and 1,000 lin. ft. of 16-in. c.-i. pipe; (b) construction of a 2,000,000-gallon concrete high-level basin, and the construction of a 225,000-gallon concrete pump well. Particulars may be had upon application to L. A. Thornton, City Engr.

Wilkie, Sask.—Bids will be received by T. A. Dinsley, Secy.-Treas., until noon, Aug. 21, for supply and delivery of the following machinery, materials, and performance of certain works: (A) Electrical machinery: One 60 KW., 3-phase, 50-cycle, 2,200-volt A. C. generator, one exciter for above, one marble switchboard, instruments and switches, three 2,200 volt motors, back geared to pumps; five transformers for lighting system, series tungsten street lighting system, approximately 25 cwt. waterproof copper wire (line material, guy wire, arms, pins, insulators, etc.), cedar poles. (B) One 100 I. HP. international combination engine. (C) Pumping machinery: one working head and deep well cylinder, one 500,000-gallon pump, one air compressor, necessary shaftings and belting. (D) One pneumatic storage tank. (E) Approximately 1,100 ft. 8-in., 4,800 ft. 6-in., 2,000 ft. 4-in. c.-i. water pipe, 15 hydrants and 22 valves. (F) Trenching, laying c.-i. water pipes, hydrants, valves, etc., and backfilling. (G) Erection of power house and construction of reservoir. Plans and specifications may be seen at the office of the Secretary-Treasurer or on application to McArthur & Murphy, Engrs., Bottomly Block, Saskatoon, Sask.

Gleichen, Alta.—Bids will be received until 6 p. m., Aug. 11, by W. J. Burr, Secy.-Treas., for the following: One return tubular boiler and stack, one duplex steam pump, one air compressor and air lift pump. Specifications and all information may be obtained at the offices of the John Galt Engineering Co., 317 Portage Ave, Winnipeg.

SEWERAGE.

*(*Denotes that this work is advertised in Engineering News.)*

Boston, Mass.—Bids will be received until Aug. 4 by the Public Works Department for sewerage works in Champney St., Brighton, and in Talbot Ave., Dorchester. Louis K. Rourke is Comr. of Pub. Wks.

Yonkers, N. Y.—The Common Council has directed the construction of a trunk sewer and appurtenances, including a screening and settling plant and pumping station, in the Nepperhan Valley. Samuel L. Cooper, City Engr.

Buffalo, N. Y.—The City Council has ordered the construction of sewers as follows: 30 and 27-in. brick and 24 and 18-in. tile sewers in Suffolk, between Taskio Pl. and Rutgers St.; 15, 12 and 10-in. tile in Rutgers, Bowdoin and Westminster Sts; 12 and 10-in. sewers in Berea, Westminster, Georgetown, Fredo and Spann Sts., and 10-in. tile sewers in Main, Case and Cable Sts.

A contract for the construction of 24-in. brick sewer in Sessions Ave. and 10-in. tile sewers in Markham, Hoyer and Medford Pl., has been awarded to JOSEPH STABEL & CO.

Fairport, N. Y.—We are officially advised that plans are being prepared for constructing 4,200 ft. of sewers on High and East Sts., Fairport. E. R. Bowerman is Design. Engr.

New York, N. Y.—Bids will be received by Alfred E. Steers, Pres, Boro. Brooklyn, until 11 a. m. Aug. 9, for constructing a sewer in 21st Ave, from 75th to 84th St., estimated at $39,598, and for similar work in various other streets.

+Riverton, N. J.—We are officially advised that the contract for constructing sewers in Highway, Midway, Seventh, Eighth and Main Sts., in all about 4,500 ft., with manholes, etc., was awarded on July 27, to P. J. BYRNE, Burlington, N. J. Noted July 27.

Paterson, N. J.—Bids will be received by the Board of Public Works until Aug. 8, for the construction of the West Paterson and Totowa sewers. H. J. Harder is City Engr.

+Doylestown, Pa.—A contract for constructing a sewerage system and sewage disposal plant has been awarded to COSTELLO & CO., Philadelphia, Pa., at $77,562.

Portage, Pa.—Bids will be received by P. F. Campbell, Boro. Engr., until 8 p. m., Aug. 5, for constructing sewers, as follows: Mountain Ave., 420 ft., 8-in.; Main St., 800 ft., 12-in.; Caldwell Ave., 1,730 ft., 12-in.; Caldwell Ave., 1,000 ft., 15-in.; borough line to outlet, 1,050 ft., 15-in.; branches to curb, 1,760 ft., 6-in. 110 terra-cotta Y's, 7 brick manholes, 7 8-in. lamp holes, and 3,708 cu. yds. of excavation 2 ft. wide.

Lake Charles, La.—Bids will be received until Sept. 11 for constructing approximately 22 miles of clay pipe sewers 24 in. to 6 in., with one pumping station and centrifugal pumps driven by electric motor or gasoline engine, also with four reinforced concrete reduction tanks. Plans are on file with A. A. Wentz, Sec., Lake Charles. For specifications address W. G. Kirkpatrick, Engr., Jackson, Miss.

***Louisville, Ky.**—Bids will be received by the Commissioners of Sewerage, P. L. Atherton, Chn., until noon, Aug. 18, for constructing the Alta Ave. sewer, Contract No. 84. The work consists of 4,220 ft. of 10-in. sewer and 24-in. to 45-in. storm water drain, and 4,220 ft. of 10-in. pipe. Chas. P. Weaver is Secy.-Treas., and J. B. F. Breed, Ch. Engr.

Columbus, Ohio.—Bids will be received by H. S. Holton, Dir. Pub. Ser. until August 15, for the labor and materials necessary to construct a sewer in Milo, a suburb of Columbus.

Clyde, Ohio.—Bids will be received by H. M. Bacon, City Clk., until Aug. 7, for constructing two sewers, estimated at $18,000 and $19,000, respectively.

Girard, Ohio.—Bids will be received by the Village Council until Aug. 14 for constructing a storm water sewer in Liberty St. Jas. E. Stotler is Vil. Clk.

Toledo, Ohio.—Bids will be received by Fred. Shane, Secy. Bd. Pub. Ser., until Aug. 3, for constructing Local Sewer No. 1118.

Zanesville, Ohio.—Bids will be received by the Director of Public Service, M. L. J. Logsdon, Clk., until noon, Aug. 4, for constructing a sanitary sewer.

Vincennes, Ind.—The city is considering the improvement and extension of its sewer system, at an estimated cost of $334,500. George A. Sturtevant, Dearborn Bldg., Chicago, Ill., is Consult. Engr.

Arlington Heights, Ill.—Bids will be received until Aug. 3, for constructing approximately 4,000 ft. of 33 to 42-in. concrete sewers and 33,[illegible] lin. ft. of 8 to 27-in. pipe sewers, and sewage purification works. H. L[illegible]zen is Secy. Bd. of City Trustees. [illegible]ng & Stone, Monadnock Block, Chicago, are Engrs.

Flora, Ill.—Plans have been prepared by J. S. Spiker, Vincennes, Ind., for constructing a sewer system.

Urbana, Ill.—Press reports state that plans and specifications have been completed by Charles Cottingham, Engr., Danville, Ill., for draining the Boneyard branch between Urbana and Champaign about 4,385 acres, estimated at $233,103.

Laporte City, Iowa.—Bids are being received for laying 900 ft. of 10-in. and 1,200 ft. of 8-in. pipe sewer, the pipe being furnished by the Commercial Sewer Co., H. B. Lizer, Secy, Laporte City. Ralph B. Sippy, Waterloo, Iowa, is Engr.

Muscatine, Iowa.—Bids will soon be received for extending the main trunk sewer from West Eighth St. a distance of 300 ft.

***Ely, Minn.**—We are officially advised that bids for constructing one sanitary and one storm sewer, a sedimentation tank to be connected with the sanitary sewer, and for laying a water main, were received on July 18, as follows: Albert Kolstad, Ely, $17,538; H. L. Bartlett Co., Virginia, Minn., $12,586; Ed. Dohl, Duluth, Minn., $17,356; Postoret-Lawrence Co., Duluth, Minn., $16,522; J. D. O'Connell, Duluth, Minn., $14,526. J. J. Connolly, St. Paul, Minn., $16,462. I Wisted, Jr., is City Clk. and O. E. Brownell, City Engr. Noted July 7.

Norfolk, Neb.—Bids will be received by the City Clerk, until 5 p. m. Aug. 7, for the construction of sanitary sewers in sewer districts No. 20, 21, 22 and 23, according to the plans and specifications on file in the office of the City Engineer.

Lubbock, Tex.—Press reports state that bids will be received by F. E. Wheelock, Mayor, until Aug. 14, for constructing a sewerage disposal plant and septic tank.

Mt. Pleasant, Tex.—We are officially advised that Mobberly & Burton, Woodruff Bldg., Springfield, Mo., Engrs., are preparing plans for a sewer system estimated at $16,000, to be installed in Mt. Pleasant, Texas.

***Muskogee, Okla.**—We are officially advised that bids were received on July 25, by the City Council, as follows: Contract G, Coody Creek Sanitary Outfall Sewer: (a) monolithic, (b) brick, (c) manufacturing pipe: Engr's estimate, (a) $30,085; (b) $34,373; (c) $30,080. Heman Construction Co., (a) $22,056; (c) $26,871. W. W. Fuller, (a) $26,782; (b) $32,120; (c) $29,838. Hoff & Williams, (a) 27,006; F. P. McCormick, (a) $23,520; (c) $29,241. Nelson Bros., (a) $30,316; (b) $28,204; (c) $34,059. Noted July 13.

+Colorado Springs, Colo.—A contract for the sanitary sewer work to be done by the city this summer has been awarded by the City Council to J. S. SCHWARTZ, Colorado Springs, at $18,576. The sewer extensions are to be made in all parts of the city and work will be started immediately. Noted July 13.

Salt Lake City, Utah.—Bids will be received by the Board of Public Works, H. B. McMillan, Chn., until Aug. 11, for constructing sewers in Sewer Extensions Nos. 290, 292 and 293.

Portland, Ore.—The City Council is considering a plan to repair the Tanner Gulch sewer, at a cost of $23,300.

Salem, Ore.—The lowest bid received for constructing the Union St. sewer was submitted by the Jahn Contracting Co., at $46,672.

Coronado, Cal.—Bids will be received by W. T. Clark, City Clk., until 3 p. m., Aug. 7, for sewer construction.

+Los Angeles, Cal.—The Supervisors have awarded a contract to GEO. ARMITAGE, Lincoln Ave., North Pasadena, for the construction of a concrete storm water culvert on the grounds of the County Detention Home on Mission Rd., at $7,300.

Los Angeles, Cal.—Plans have been adopted for a storm sewer to cost $569,000. Homer Hamlin is City Engr.

South Pasadena, Cal.—The city is considering the immediate construction of a sewer system to cost $250,000. The purchase of a 10-acre tract for a city sewage farm and the sale of sewage water to farmers for irrigating purposes are said to be a part of the plan.

Pacific Grove, Cal.—Bids will be received at the office of the City Clerk until 8 p. m., Aug. 14, for constructing 5,000 ft. of 48 and 54-in. and 1,400 ft. 20 and 24-in. concrete pipe sewers, manholes, retaining walls, concrete curbs and gutters. The cost is estimated at $52,000. T. B. Hunter, of Hunter & Hudson, Monadnock Bldg., San Francisco, is Design. and Consult. Engr.

+San Francisco, Cal.—The contract for constructing a main sewer in Howard St., from Fourth to Sixth St., has been awarded to HEALY, TIBBETTS CONSTRUCTION CO., Main and Market Sts., San Francisco, at $92,254. Noted July 21.

STREETS AND ROADS.

*(*Denotes that this work is advertised in Engineering News.)*

Portland, Me.—Bids will be received by B. Bradbury, Comr. Pub. Wks., until noon, Aug. 21, for constructing a concrete road on Brighton Ave.

Boston, Mass.—Bids will be received until Aug. 7 by the Public Works Department for constructing tar macadam roadway in Frost Ave., Dorchester, and wood block pavement in Ferdinand, Fayette, Melrose and Church Sts. Louis K. Rourke is Comr. Pub. Wks.

New York, N. Y.—Bids will be received by George Cromwell, Pres. Boro. Richmond, until noon, Aug. 8, for regulating and repaving with wood block pavement on concrete foundation Richmond Terrace, between the curbs and the outer rails of car tracks, from Lafayette Ave. to Harbor Road, together with all work incidental thereto.

New York, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., Aug. 9, for regulating, grading, curbing and laying sidewalks on Union St., from Classon Ave., to Bedford Ave., except the land occupied by the Brighton Beach Railroad, together with all work incidental thereto.

New York, N. Y.—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., Aug. 28, for widening the roadway and repaving with special improved granite block pavement on a concrete foundation the roadway of Lafayette St., from Great Jones St. to Astor Pl.

New York, N. Y.—Bids will be received by Cyrus C. Miller, Pres. Boro. The Bronx, until 10.30 a. m., Aug. 8, for regulating, grading, paving, etc., various streets, and for furnishing 20,000 gals. of bituminous road surfacing material.

New York, N. Y.—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., Aug. 9, for regulating, repaving and otherwise improving various streets.

Irvington, N. J.—Bids will be received by M. Stockman, City Clk., until Aug. 7, for laying telford pavement on Clinton Ave.

Newark, N. J.—Bids will be received until Aug. 3 for paving the following streets: Essex Court, from Mulberry to Beaver Sts., with brick, 675 sq. yds.; Johnson Ave., from Watson Ave. southerly 315 ft., with brick, 1,050 sq. yds.; Quitman Alley, from West Kinney to Baldwin Sts., with brick, 5,000 sq. yds.; West Kinney St., from Washington to High St., with granite, 1,730 sq. yds.; Lincoln Ave., from Irving St. to Verona Ave., with bitulithic, 1,950 sq. yds. All to be laid on a 6-in. concrete foundation.

***Trenton, N. J.**—Bids will be received until 10:30 a. m., Aug. 16, by the Board of Freeholders at Camden, N. J., for building 2.92 miles of gravel road from Gibbsboro to Berlin. The estimated quantities are as follows: 8,006 cu. yds. of compact gravel, 1,000 ft. of underdraining, 12,194 cu. yds. of excavation, 533⅓ sq. yds. more or less vitrified block gutters.

Coraopolis, Pa.—Bids will be received by E. E. Harper, Boro. Secy., until Aug. 7, for grading, paving and curbing Fourth and McIntyre Aves., Mill and Main Sts., in all about 7,333 lin. ft. of curbing and 11,997 sq. yds. of paving. J. B. Hogg, Park Bldg., Pittsburg, is Boro. Engr.

Harrisburg, Pa.—Bids will be received by the State Highway Department, Capitol Bldg., Harrisburg, until 2 p. m., Aug. 23, for the construction of 22,560 ft. of road, extending from the line between Mifflin and Juniata Counties, to the west borough line of Lewistown, in Derry Township, in the County of Mifflin, and 34,793 ft. of road, extending from the east borough line of Mifflintown to the county line between Juniata and Mifflin Counties, in Fermanagh Township, in the County of Juniata. Plans and specifications can be seen at the office of the County Commissioners, Mifflintown, Pa., and at the office of the State Highway Department, Harrisburg, Pa. Edward M. Bigelow is State Highway Comr.

Latrobe, Pa.—Bids will be received by the Borough of Latrobe until 8 p. m., Aug. 14, for grading, curbing and paving Main St., from Alexandria St. to the Lehigh Valley R. R. Approximate estimate, about 1,700 cu. yds. excavation, 21,000 lin. ft. concrete curb and water table, 3,200 sq. yds. of paving with buff vitrified paving blocks. Plans and specifications may be seen at the office of the Borough Engineer, City Hall, Latrobe. E. M. Eaton is Secy.

Pittsburg, Pa.—Bids will be received by R. J. Cunningham, County Controller, until Aug. 8, for improving the following county highways: Cliff Mines and Coraopolis Heights Road, 4.8 miles; Buena Vista and Lovedale Road, 3.6 miles; Ben Avon and Lowries Run Road, 2¼ miles; Glass Run Road, 2½ miles; Friday Road, .9 mile.

Pittsburg, Pa.—Bids will be received by the City Controller until 10 a. m., Aug. 4, for grading, curbing, paving and otherwise improving various streets. Joseph G. Armstrong is Dir. Dept. Pub. Wks.

***Sayre, Pa.**—Bids will be received by H. H. Mercereau, Boro. Clk., until 7 p. m., Aug. 7, for approximately 8,000 sq. yds. of vitrified brick paving, 1,800 cu. yds. of excavation and 4,000 lin. ft. of combined concrete curb and gutter. Specifications for the work are on file with the Borough Clerk, and at the office of Engineering News, 220 Broadway.

Sewickley, Pa.—Bids will be received by Minott M. Baker, Act. Boro. Engr., Municipal Bldg., Sewickley, until 4 p. m., Aug. 8, for paving portions of three streets with vitrified brick.

South Fork, Pa.—Bids will be received by the Council until Aug. 7, for paving about 14,500 sq. yds. of streets, estimated at $20,000. O. P. Thomas, Johnstown, Pa., is Boro. Engr.

Wilkes-Barre, Pa.—The contract for constructing the Trucksville Road, awarded to HERICK & CO., was awarded on amiesite, not alcolite, as noted in the issue of July 27. The amiesite will be furnished by the General Crushed Stone Co., Easton, Pa., the agents in that locality.

Wilmington, Del.—Bids will be received by the Board of Directors of the Street and Sewer Department until 3 p. m., Aug. 8, for grading, furnishing and setting new curb, resetting old curb, and paving 5,000, 7,500, 10,000, 20,000, 30,000, 50,000 or 75,000 sq. yds. with sheet asphalt bituminous macadam, bitulithic, vitrified brick, granite block, wood block or amiesite pavement. Specifications and proposal blanks may be obtained at the office of the department. L. V. Christy is Secy.

Christiansburg, Va.—Bids will be received until Aug. 12 for constructing one mile of macadam road in Montgomery County. P. St. J. Wilson, Richmond, is State Highway Comr.

Culpeper, Va.—Bids will be received by Maj. H. L. Pettus, Q. M., Washington, D. C., until Aug. 21, for repairs to roadway in the Culpeper National Cemetery.

Montgomery, Ala.—Bids will be received by Robert Tate, City Treas., until Aug. 8, for constructing 6,100 sq. yds. of pavement.

Mansfield, La.—Bids will be received by W. E. Singleton, Town Clk., until Aug. 8, for the construction of 82,840 sq. ft. of cement concrete sidewalk and 5,000 cu. yds. of grading.

Batavia, Ohio.—Bids will be received by the county commissioners until Aug. 8, for grading and macadamiing 1.12 miles of road in Tate Township, Clermont County, estimated cost $6,613, and for grading and macadamizing 2.09 miles of road in Union Township, estimated cost $12,443.

Caldwell, Ohio.—Bids will be received by the Village Council until noon, Aug. 29, for improving various streets. Hugh F. Neuhart is Village Clk.

Delaware, Ohio.—Bids will be received by the Director of Public Service until Aug. 10, for paving with vitrified brick or wood block Compbell St., 3,964 sq. yds. and 1,065 sq. yds. within railroad tracks and on Central Ave., and Elizabeth St., 3,724 sq. yds. and 1,135 sq. yds. within the railroad tracks.

East Liverpool, Ohio.—Bids will be received by the Director of Public Service until noon, Aug. 9, for improving Cadmus St., from Minerva St. to the northerly line of lot No. 939 in Wucherer's Addition. C. V. Beatty is Dir.

McConnellsville, Ohio.—Bids will be received by the County Commissioners until Aug. 9, for grading and macadamiing two miles of road in Morgan Township, Morgan County. Estimated cost, $16,568.

New Philadelphia, Ohio.—Bids will be received by the County Commissioners until Aug. 11, for grading and paving with brick 2.01 miles of road in Dover Township Tuscarawas County. Estimated cost, $32,300.

Pleasant Ridge, Ohio.—Bids will be received by H. B. Hayden, Vil. Clk., until Aug. 8, for laying cement sidewalks on Penn Ave., Gay, Locust and William Sts.

St. Clairsville, Ohio.—Bids will be received by the County Commissioners until Aug. 10, Clairsville, for grading and macadamizinz 0.84 mile of road in Goshen and Union Townships, Belmont County, estimated cost $8,420, and for grading 2.26 miles of road in Marion township, estimated cost $7,400.

Steubenville, Ohio.—Bids will be received by the Trustees of Wells Township, Herbert Cox, Clk., until 2 p. m., Aug. 5, for constructing 8,000 sq. ft. of cement sidewalk.

Toledo, Ohio.—Bids will be received by Fred. Shane, Secy. Bd. Pub. Serv., until Aug. 3, for improving a portion of Belmont Ave. by paving with either vitrified brick on a concrete foundation or macadam with bituminous binder, including curbing, grading, etc.

INDIANA ROAD IMPROVEMENTS.

Bids will be received as follows for highway improvements in Indiana: Aug. 8, Paoli, by the County Commissioners for 6,581 ft. of road. Alvin B. Ham is County Audr. Aug. 31, Greenfield, by the Commissioners of Hancock and Henry Counties. Chas. H. Troy is Audr. Hancock County.

Clinton, Ind.—Bids will be received by the City Council until 8 p. m., Aug. 7, for 20,733 sq. yds. of brick, sheet asphalt, creosote wood block and bituminous pavement, and 10,167 lin. ft. of combined curb and gutter. H. M. Ferguson is Mayor; T. L. McDonald, City Clk., and W. R. Paige, Terre Haute, Ind., Engr.

***Hillsdale, Mich.**—Bids will be received until noon, Aug. 16, for the construction of about 10,500 sq. yds. of brick pavement in this city. Plans and specifications can be seen at the office of the City Clerk or will be sent upon application. C. L. Herron, City Engr.

+Springfield, Ill.—The contract for paving Pasfield St. from Cook to Jefferson St., to cost $13,000, has been awarded to the CAPITAL CITY CONCRETE CONSTRUCTION CO., and the contract for paving Laurel St. from College St. to Hawthorne Pl., has been awarded to JOHN E. BRETZ, at $13,900.

Charleston, Ill.—Bids are asked by the Board of Highway Commissioners until 11 a. m., Aug. 23, for the construction of the first two sections of 16 of the bituminous macadam roads in Seven Hickory Township, Coles County, Ill. These sections are approximately one mile each in length and are to be limestone, macadam, 8-in. thick after rolling, 9 ft. wide and treated with bituminous binder via penetration method. Information may be obtained and plans, specifications and blank forms may be seen at the office of S. McGroy, Engr. in Charge, at2518 Sixth St., Charleston, or at the office of T. N. Cefer, Att'y., at Charleston.

+Milwaukee, Wis.—The Department of Public Works, Harry E. Briggs, Comr., has awarded a contract for asphalt paving on 27th St., between Vliet St. and Lisbon Ave., to the BADGER CONSTRUCTION CO., Railway Exchange Bldg., Milwaukee, at $1.45 per sq. yd.

Rhinelander, Wis.—Bids will be received by the Board of Public Works, Geo. C. Jewell, Chn., until Aug. 7, for paving with macadam a portion of Eastern Ave., about 1,606 sq. yds.

Mason City, Iowa.—Bids will be received by the City Council until Aug. 7, for constructing approximately 14,574 sq. yds. of cement pavement, 52 sq. yds. brick pavement, and 7,800 lin. ft. cement curbing. J. H. McEwen is City Clk.

Atchison, Kan.—Press reports state that bids will be received by Edw. Iverson, County Clk., until Aug 8 for improving portions of two roads.

***Longview, Tex.**—Bids will be received by the City Council until 8 p. m., Aug. 11, for furnishing labor and materials for approximately 17,000 sq. yds. of pavement. Proposals are invited for furnishing labor or materials or both for No. 1 brick paving block or for creosoted wood blocks. Plans and specifications may be seen at the office of the Mayor of Longview and in the office of the Aetna Engineering Bureau, Consult. Engrs., 17 North LaSalle St., Chicago. G. D. Bodenheim is Mayor.

Colfax, Wash.—Bids will be received by the County Commissioners until Aug. 7, for constructing and improving 5,600 ft. of the Colfax and Oalouse City Road. S. M. McCroskey is County Audr.

Elma, Wash.—Bids will be received by the County Commissioners until 4 p. m., Aug. 4, for construction 2 permanent highways, according to plans filed in office of the County Engineer.

Everett, Wash.—Bids will be received by the County Commissioners until Aug. 14, for constructing Permanent Highway No. 1, consisting of preparing subgrade, cleaning and reshaping ditches and constructing a hard surface pavement. B. T. Lee is Clk.

Spokane, Wash.—Bids will be received by the City Council until 11 a. m., Aug. 10, for improving portions of Wall St., Glass and Euclid Aves., by grading, paving, and constructing sidewalks. C. A. Fleming is City Clk.

Eureka, Cal.—Bids will be received by the Clerk of the Board of Supervisors, until 2 p. m., Aug. 15, for the construction of seven miles of wagon road along the Klamath River in Road District No. 5, in Humboldt County. Specifications on file with Geo. W. Cousins, Clk.

San Jose, Cal.—Bids will be received by Henry A. Pfister, Clk. Bd. Supvrs. of Santa Clara County, until 11 a. m., Aug. 7, for improving Tully Road and White Road. Specifications for this work are on file in the office of the Board.

Santa Barbara, Cal.—Bids will be received by the Board of Supervisors until 10 a. m., Aug. 5, for furnishing all labor and material necessary for paving about 5½ miles of road in Permanent Road Division of Montectio in Santa Barbara County. Specifications at office of Board. C. A. Hunt is County Clk.

Hastings, Ont.—Bids will be received until Aug. 10 by Alex. Wilson, Vil. Clk., for 50,000 sq. ft. of cement pavement.

***St. Vital** (Riel post-office), **Man.**—Bids will be received by E. A. Poulain, Secy.-Treas., until 8 p. m., Aug. 14, for paving Pembina Highway, and St. Mary's Road. G. Mullon, 372 St. Jean Baptiste St., St. Boniface, Man., is Engr.

MANUFACTURING PLANTS.

Boston, Mass.—The American Cuetwine Co. has been organized for the manufacture of twine. Capital, $100,000; Arthur A. Brigham is Pres.

Marblehead, Mass.—The F. A. Parker Shoe Co. has been organized for the manufacture of shoes. Capital, $50,000. Jos. E. Parker is Pres.

+Worcester, Mass.—The contract for the warehouse and office for the Hammond Co. has been awarded to the C. J. CROSS CO., INC., to be 60 ft. × 80 ft., and to contain refrigerating plant and full equipment for handling beef products.

Pawtucket, R. I.—The Killingly Mfg. Co. has been organized for the manufacture of cotton cloth and yarns. Capital, $500,000. Geo. M. Faulkner, 1124 Commonwealth Ave., Brookline, is Pres.

+Allentown, N. Y.—The contract has been awarded to EARL B. DOUGLASS, Allentown, Pa., by the Dominion Steel Co., for a wire mill to cost $1,500,000. The mill is to have a capacity of 400 tons of finished wire products a day, and will form part of the $15,000,000 addition to the company's present plant. The whole sum of $15,000,000 is to be expended by the company during the next two years.

Buffalo, N. Y.—Plans are being prepared by Dunning & Dunning, 7 Henkel Bldg., for a factory, 85 × 150 ft. to be erected at Baits Ave., Manitoba St. and the Erie R. R., by the Central Casket Co., Chicago and Ohio Sts. The estimated cost is $38,000.

Newtown, L. I., N. Y.—The Brooklyn Union Gas Co., 180 Remsen St., Brooklyn, are receiving bids for the construction of a 1-story factory at Whitlock Ave. and Grieffenberg St., Newtown.

Oneonta, N. Y.—The White Tock Knitting Mills of Walton has been incorporated with a capital of $15,000. The directors are Herbert Shaw, Paul Nichols, James Mann, Percy Strong and C. G. Nichols.

+Frankford, Pa.—The contract has been awarded to GEORGE GRAY, 4340 Factory St., for the construction of a 1-story, 15 × 176 ft., brick factory at Unity and Eliabeth Sts. Plans were prepared by Lackman & Murphy, Archs., Witherspoon Bldg., Philadelphia.

Philadelphia, Pa.—Plans are being prepared by Charles H. Caspar, Arch., West End Trust Bldg., for the construction of a packing plant to be of brick and concrete, three stories high, for G. F. Pfund & Sons.

+The contract has been awarded to GEORGE WATSON & SON for the construction of a 5-story printing house for the Wilmer Atkinson Printing Co. The building will occupy a site on West Washington and Locust Sts.

Sub bids are being received by Charles H. Caspar, West End Trust Bldg., for the construction of a 5-story brick and steel brewery at Tenth and Montgomery Ave. The owners are Class & Nachod Brewing Co., 1729 North Marvine St.

The Eagle Coal & Ice Co. are having plans prepared for the erection of a 1-story ice manufacturing plant, 100 × 250 ft. at 57th St. and Hoffman Ave.

Pittsburg, Pa.—The Eureka Chemical & Manufacturing Co. will erect a plant for the manufacture of asphalt products, at Penn and Brushton Aves.

+Reading, Pa.—A contract has been awarded to C. H. SCHLEGEL for the construction of a factory for W. L. O. Gehrke, to be erected on the west side of Locust St. between Marion and Perry Sts. The estimated cost is $10,000.

Baltimore, Md.—It is reported that a fertilizer factory will be erected at Curtiss Bay. The plant will involve an outlay of almost $2,000,000. Forty acres of lands have already been secured and architects are at present preparing the plans and specifications. The Standard Oil Co. and a number of Florida capitalists are said to be behind the proposition.

Richmond, Va.—The Kingan Packing Co. will construct buildings to be 1-story higher than old; will be of brick and stone construction, steam heat, electric lighting, plumbing, slate roof. Bids will be taken as soon as plans and specifications are completed.

Suffolk, Va.—The Montgomery Lumber Co. will rebuild its saw and planing mill recently burned at loss of $45,000. The new buildings to be of brick and stone construction, steam heat, gas and electric lighting, plumbing, slate roof.

+Jacksonville, Fla.—Press reports are to the effect that HUGGER BROS., of Montgomery, Ala., have been awarded the contract for the construction of the plant for the Osceola Fertilizer Co. The plant is to have a capacity of 50,000 tons of fertilizer annually.

Cleveland, Ohio.—J. Milton Dyer, Arch., has let the contract for the excavation for the new building for the Sunshine cloak factory to be erected on Superior Ave. and East 24th St. to HAYES & GREELEY. The architect is now taking bids for the erection of the building.

Toledo, Ohio.—Langdon & Hohly, 1442 Nicholls Bldg., will let contracts about Aug. 1, on a 2-story and basement factory, 60 × 175 ft. for the Defiance Tick Mitten Co., care P. C. Teterman, Toledo, Ohio. The plant will be of steel and concrete construction; cost $40,000.

G. S. Mills, 1234 Ohio Bldg., is receiving bids on a 3-story and basement factory, for the Kinsey Mfg. Co., Central Ave., Toledo.

Youngstown, Ohio.—The capital stock of the Youngstown Sheet & Tube Co. will be increased from $10,000,000 to $15,000,000. The new capital will be 7% preferred stock and will be used for the erection of a new open-hearth plant of eight mills, with a blooming mill, a bar mill and probably one other mill.

(Continued on page 60.)

LIST OF CONTRACTS PENDING

Light, Heat and Power Plants.

Bids close.		Noted in issue of
8- 4	Turbo-generator unit, etc., Panama (U. S. Poss.)	7-20
8- 4	Power plant, etc., Liberty, Mo.	8- 3
8- 6	Power plant and equipment, Phoenix, Ariz.	7-27
8- 7	Lighting fixtures, Akron, Ohio	8- 3
8- 7	Electric lighting fixtures, Bremerton, Wash.	8- 3
8- 7	Electric light plant, Sebewaing, Mich.	8- 3
8- 8	Copper pipe and lead-covered cable, Washington, D. C.	8- 3
8- 8*	Railway construction, Sisterville, W. Va. (Elec. Rys.)	7-27
8- 9	Generators and switchboard, Baltimore, Md.	7-27
8-10	Tubular boilers, Athens, Ohio	7-27
8-10	Generators, etc., Penticton, B. C.	7-20
8-10	Conduit, New York, N. Y.	8- 3
8-10	Air compressor, New York, N. Y.	8- 3
8-11	Lamp posts, New York, N. Y.	8- 3
8-12	Lamps and feed wires, Mount Vernon, Ohio	7-27
8-15	Fire alarm system, Newport, R. I.	8- 3
8-15	Generators, Niles, Mich.	8- 3
8-16	Lighting fixtures, Washington, D. C.	8- 3
8-17*	Railway construction, Campbelltown, Pa. (Elec. Rys.)	7-27
8-18	Boiler house, Washington, D. C.	8- 3
8-19	Switchboard feeder panels, Boston, Mass.	8- 3
8-21	Generator, etc., Wilkie, Sask.	8- 3
8-22	Arc lamps, Palatka, Fla	8- 3
8-25*	Wiring, etc, New York, N. Y.	8- 3
8-31	Generator sets, Los Angeles, Cal.	7-13
9-25	Electrical supplies, Brazil (Foreign)	7-27
1-30, 1912	Power generating and pumping plants, Australia (Foreign).	6-15

Bridges.

Bids close.		Noted in issue of
8- 3	Bridges, Clintwood, Va	8- 3
8- 3	Bridge, Sparta, Ga	8- 3
8- 3	Bridges, Elderslie, Ont	8- 3
8- 4	Bridges, Washington, Pa	8- 3
8- 4	Bridge, Albert Lea, Minn	7-27
8- 5	Bridges, Muskogee, Okla	7-27
8- 5	Bridges, Omaha, Neb	7-27
8- 5	Bridges, Metropolis, Ill	7-20
8- 5	Bridge, Timewell, Ill	7-20
8- 5*	Bridge, Massena, N. Y	7-20
8- 5*	Bridge, Benton, Tenn	7-20
8- 5*	Bridge, Chicago, Ill	7-27
8- 5	Bridges, Walkerton, Ont	8- 3
8- 5	Bridge, Hamilton, Ohio	8- 3
8- 7	Bridge work, Mayersville, Miss.	8- 3
8- 7	Bridge, Fowler, Ind.	8- 3
8- 7	Bridges, Franklin, Ind	8- 3
8- 7	Bridge, Jackson, Cal	8- 3
8- 7	Bridge, Santa Barbara, Cal.	8- 3
8- 7	Bridges, Grenada, Miss	7-27
8- 7	Bridges, San Andreas, Cal	7-27
8- 7	Bridge, Youngstown, Ohio	7-27
8- 8	Bridge, Plymouth, Ind	7-27
8- 8	Bridge, Cambridge, Ohio	7-20
8- 8	Substructure, Steubenville, Ohio	7-20
8- 8	Bridge, Madison, Ind	7-27
8- 8	Bridge, Rockville, Ind	7-27
8- 8	Bridges, Albion, Ind	8- 3
8- 8	Bridge, Newton, Kan	8- 3
8- 8	Bridges, Merced, Cal	8- 3
8- 9	Bridge work, Ipswich, S. Dak.	8- 3
8- 9	Bridges, Hamilton, Ohio	7-27
8-10	Bridge work, New York, N. Y.	8- 3
8-10	Bridge work, Marysville, Mo.	8- 3
8-11	Bridges, Pittsburg, Pa	8- 3
8-11	Bridges, Indianapolis, Ind.	8- 3
8-12	Bridge, Harrisburg, Pa	8- 3
8-12	Bridges, Shelbyville, Ind	8- 3
8-12*	Bridge, Chicago, Ill	8- 3
8-15	Bridges, Modesto, Cal	8- 3
8-15	Bridge, Eureka, Cal	8- 3
8-15	Bridge work, St. Louis, Mo.	8- 3
8-15	Bridge, Delphi, Ind	8- 3
8-16	Approaches, Columbus, Ohio	7-27
8-17	Bridge, Reno, Nev	8- 3
8-19	Bridge, Bucyrus, Ohio	8- 3
8-23	Bridges, Bristol, Va	7-27
8-24*	Bridge, Grand Rapids, Mich.	8- 3
8-26	Bridge work, Cleveland, Ohio	8- 3
8-31	Bridge, Bermuda, La	7-27
9- 1	Bridges, Siam (Foreign)	6-29
9- 6*	Bridge, Tampa, Fla.	7-13

Buildings.

Bids close.		Noted in issue of
8- 3	Church, Brenham, Tex	8- 3
8- 3	Theatre bldg., Edenburg, Pa.	8- 3
8- 4	School, Coalville, Utah	8- 3
8- 4	Church, Topeka, Kan.	8- 3
8- 4	Constructing home, Liberty, Mo.	8- 3
8- 4	U. S. post-office, Sulphur Springs, Tex.	6-29
8- 5*	Building, Perry, N. Y	7-27
8- 5	School, Morrison, Iowa	8- 3
8- 7*	Memorial Institute, Richmond, Va.	7-13
8- 8	U. S. post-office, Juneau, Alaska	7-20
8- 8	Building, Dundas, Ont	7-27
8- 8	Remodeling jail, Brazil, Ind.	7-27
8- 8	Public building, Tilbury, Ont.	8- 3
8- 8	School house, Chelsea, Mass.	8- 3
8- 9	Concrete building, San Diego, Cal.	8- 3
8-10	U. S. post-office, Lebanon, Ky.	7-20
8-10	U. S. Postoffice, Princeton, Ind.	7-27
8-12	School Plaquemine, La	8- 3
8-14	Dormitory, Darlington, Okla.	8- 3
8-14*	U. S. post-office, Richford, Vt.	7-20
8-14	Schools, New York, N. Y	8- 3
8-15	Addition to Parliament building, Victoria, B. C.	7-27
8-15	Parliament buildings, Victoria, B. C.	8- 3
8-16	U. S. post-office, Massillon, Ohio	7-20
8-17	U. S. post-office, Mineral Wells, Tex.	7-20
8-19	Training school, San Jose, Cal.	7-27
8-22	Measles pavilion, New York, N. Y.	8- 3
8-22	Asylum building, etc., Shawano, Wis.	8- 3
8-23	Repairs to U. S. post office, Peekskill, N. Y.	7-27
8-23	U. S. post office, Peekskill, N. Y.	8- 3
8-24	Building, Albany, N. Y	7-27
8-29	U. S. post-office, Wallingford, Conn.	7-20
8-29	U. S. post office, Monroe, Mich.	8- 3
8-30*	Post-office, Eufaula, Ala	7-27
9- 1	High school, South Bend, Ind.	7-27
9- 5*	U. S. post office, Gadsden, Ala.	8- 3

Water-Works.

Bids close.		Noted in issue of
8- 3	Water pipe, etc., Lima, Ohio	8- 3
8- 4	Relaying pipe, Boston, Mass.	8- 3
8- 4	Trenching, etc., Regina, Sask	8- 3
8- 4	Boilers, main, Pittsburg, Pa.	7-27
8- 4	Watermains, Nottingham, Ohio	7-27
8- 4	Water pipe, Corpus Christi, Tex.	7-27
8- 4	Water pipes, Highland Park, Ill.	7-27
8- 4	Pipe laying, Cincinnati, O.	7-27
8- 5	Irrigation system, Manteca, Cal.	7-13
8- 5	Reservoir, Pittsburg, Pa	8- 3
8- 5	Water mains, valves, etc., North Bay, Ont	8- 3
8- 6	Water system, Bridgeport, Cal.	8- 3
8- 7	Water main, Fargo, N. Dak.	8- 3
8- 7	Water main extension, Crown Point, Ind.	8- 3
8- 7	Tower and tank, Anamosa, Iowa	8- 3
8- 7	Water mains, Kiester, Minn.	8- 3
8- 7	Canal, Provo, Utah	7-27
8- 7*	Water-works, Oak Harbor, Ohio	7-27
8- 7*	Laying water pipe, Pittsfield, Mass.	7-27
8- 8	Water-works, Anselmo, Neb.	7-27
8- 3	Pipe, Freeport, N. Y	8- 3
8- 8	Steel tank, Lakeland, Ky	8- 3
8- 8	Water main, Cherokee, Okla.	8- 3
8- 8	Specials, valves, Toronto, Ont.	8- 3
8- 8	Water-works impvts., Lindsay, Col.	8- 3
8- 9	Laying pipe, Wymore, Neb.	8- 3
8- 9	Pumping station work, New York	8- 3
8- 9*	Standpipe, etc., Ithaca, N. Y.	7-27
8-10	Water-works, Malino, Neb.	7-27
8-10	Water-works, Morgan Hill, Cal.	8- 3
8-10	Water main extension, Gordon, Neb.	8- 3
8-10	Water-works, St. Clair, Minn.	8- 3
8-11	Pumps, etc., Gleichen, Alta.	8- 3
8-11	Water-works extension, Burlington, Kan.	7-27
8-11	Water-works, Ogallala, Neb.	7-27
8-12	Watermain, Italy (Foreign)	7-27
8-12	Water mains, Newburg, Ohio.	7-20
8-12	Pipe, etc., London, Ont	8- 3
8-14	Water extensions, Moose Jaw. Sash.	8- 3
8-15	Water-works, Roland, Iowa.	8- 3
8-15	Water main, Columbia Heights, Minn.	8- 3
8-15*	Pump house, etc., Fort Lenett, Me.	8- 3
8-15*	Filter and reservoir, Geneva, N. Y.	8- 3
8-15	Pipe, Columbus, Ohio	8- 3
8-16	Water system, Belton, Mont.	8- 3
8-16*	Pump, Madison Barracks, N. Y.	7-27
8-17	Water-works, Pana, Ill	8- 3
8-17	Water system, Wynot, Neb.	8- 3
8-17	Water system, Lubbock, Tex.	7-27
8-21	Engine, pump, etc., Wilkie, Sash.	8- 3
8-21	Storage dam, Clarksburg, W. Va.	8- 3
8-22	Pumping plants, Fallon, Nev.	8- 3
8-22*	Water pipe, Matteawan, N.Y.	7-27
8-23	Water-works, Thomaston, Ga.	7-27
8-23*	Pump and condenser, Lawrence, Mass.	8- 3
8-25*	Water system, Dorris, Cal.	8- 3
8-25	Dams, canals, St. Ignatius, Mont.	8- 3
8-29*	Pumps, Muskogee, Okla	8- 3
9- 1	Well, Osage, Iowa	8- 3
9- 1	Canal extension, etc., Huntley, Mont.	8- 3

Sewers.

Bids close.		Noted in issue of
8- 3	Sewer, Toledo, Ohio	8- 3
8- 3	Sewers, Arlington Heights, Ill.	8- 3
8- 4	Sanitary sewer, Zanesville, Ohio	8- 3
8- 4*	Sewers, Toronto, Ont	7-20
8- 4	Sewers, Nottingham, Ohio	7-27
8- 4	Sewers, Louisville, Ky	7-27
8- 4	Sewers, Boston, Mass	8- 3
8- 5*	Sewers, Neligh, Neb	7-20
8- 5	Sewers, Portage, Pa	8- 3
8- 7	Sewers, Huntington, W. Va.	7-20
8- 7	Sewers, Clyde, Ohio	8- 3
8- 7	Sewers, Norfolk, Neb	8- 3
8- 7	Sewers, Coronado, Cal	8- 3
8- 8	Sewers, Paterson, N. J	8- 3
8- 9	Sewers, New York, N. Y	8- 3
8- 9	Sewers, Florence, Wis	7-27
8-10*	Sewers, Lebanon, Pa	7-20
8-10*	Sewers, Nashville, Tenn	6-29
8-11	Sewers, Salt Lake City, Utah	8- 3
8-14	Sewer, Girard, Ohio	8- 3
8-14	Sewerage plant, Lubbock, Tex.	8- 3
8-14	Sewers, Pacific Grove, Cal	8- 3
8-15	Sewer, Columbus, Ohio	8- 3
8-21	Sewers, Clinton, S. C	7-27
8-12	Sewers, Newburg, Ohio	7-20
8-15*	Sewers, Fitchburg, Mass	7-27
8-18*	Sewer, Louisville, Ky	8- 3
8-22*	Sewer pipe, Matteawan, N. Y.	7-27
8-23	Sewer system, Thomaston, Ga.	7-27
9-11*	Sewers, New Orleans, La	7-13
9-11	Sewer, Lake Charles, La	8- 3

Streets and Roads.

Bids close.		Noted in issue of
8- 3	Paving, Newark, N. J	8- 3
8- 3	Paving, etc., Toledo, Ohio	8- 3
8- 4	Grading, etc., Pittsburg, Pa.	8- 3
8- 4	Paving, etc., Canton, Ohio	7-27
8- 4	Gravel road, Concord, N. H.	7-27
8- 4	Grading, etc., Arcanum, Ohio	7-27
8- 4	Paving, etc., Cambridge, O.	7-27
8- 4	Highway, North Yakima, Wash.	7-27
8- 4	Highways, Elma, Wash	8- 3
8- 4	Roads, Winchester, Ind	7-20
8- 5	Roads, Marysville, Ohio.	6-29
8- 5	Paving, Bowerston, Ohio	7- 6
8- 5	Paving, etc., Santa Barbara, Cal.	8- 3
8- 5	Sidewalk, Steubenville, Ohio	8- 3
8- 7	Roadway, Boston, Mass	8- 3
8- 7	Paving, Irvington, N. J	8- 3
8- 7	Paving, etc., Coraopolis, Pa.	8- 3
8- 7	Paving, South Fork, Pa	8- 3
8- 7*	Paving, etc., Sayre, Pa	8- 3
8- 7	Road, Colfax, Wash	8- 3
8- 7	Roads, San Jose, Cal	8- 3
8- 7	Paving, Rhinelander, Wis	8- 3
8 7	Paving, Mason City, Iowa	8- 3
8- 7	Paving, Clinton, Ind	8- 3
8- 7	Gravel roads, Liberty, Ind	7-13
8- 7	Roads, Marion, Ind	7-20
8- 7	Roads, Portland, Ind	7-20
8- 7	Roads, Salem, Ind	7-20
8-7	Roads, Fowler, Ind	7-20
8- 7	Roads, Decatur, Ind	7-20
8- 7	Roads, Brownstone, Ind	7-20
8- 7	Roads, Newport, Ind	7-20
8- 7	Road, Brookhaven, Miss	7-20
8- 7	Grading, etc., Ashland, Ohio.	7-20
8- 7	Road, New Philadelphia, O.	7-20
8- 7*	Sidewalks, Larchmont, N. Y.	7-27
8- 7	Paving, Barre, Vt	7-27
8- 7	Resurfacing, Washington, Pa.	7-27
8- 7	Road improvement, Los Angeles, Cal.	7-27
8- 7	Roads, Versailles, Ind	7-27
8- 7	Roads, Greenburg, Ind	7-27
8- 7	Roads, Washington, Ind	7-27
8- 7	Roads, Crown Point, Ind	7-27
8- 8	Roads, Spencer, Ind	7-27
8- 8	Roads, Martinsville, Ind	7-27
8- 8	Roads, Marysville, Ohio	7-20
8- 8	Roads, Vincennes, Ind	7-20
8- 8	Roads, Brazil, Ind	7-20
8- 8	Roads, Bedford, Ind	7-20
8- 8	Roads, Logansport, Ind	7-20
8- 8	Roads, Wabash, Ind	7-20
8- 8	Roads, Winamac, Ind	7-20
8- 8	Gravel road, Vincennes, Ind.	7-13
8- 8	Paving, Montgomery, Ala	8- 3
8- 8	Road, Paoli, Ind	1- 3
8- 8	Paving, Atchison, Kan	8- 3
8- 8	Repaving, etc., New York, N. Y.	8- 3
8- 8	Paving, etc., New York, N. Y.	8- 3
8- 8	Paving, Sewickley, Pa	8- 3
8- 8	Road improvement, Pittsburg, Pa.	8- 3
8- 8	Paving, etc., Wilmington, Del.	8- 3
8- 8	Sidewalk, etc., Mansfield, La.	8- 3
8- 8	Sidewalks, Pleasant Ridge, Ohio	8- 3
8- 8	Grading, etc., Batavia, Ohio	8- 3
8- 9	Grading, etc., New York, N. Y.	8- 3
8- 9	Repaving, etc., New York, N. Y.	8- 3
8- 9	Street improvement, East Liverpool, Ohio	8- 3
8- 9	Grading, etc., McConnellsville, Ohio	8- 3
8- 9*	Road improvement, Bridgeton, N. J.	7-13
8- 9	Highway impvt., Jonesville, Va.	7-20
8- 9	Roads, Lafayette, Ind	7-20
8- 9	Roads, Corydon, Ind	7-20
8- 9	Roads, Logansport, Ind	7-20
8- 9	Roads, Noblesville, Ind	7-20
8- 9	Macadamizing, Grove City, Ohio	7-27
8- 9	Macadamizing, etc. Columbus, Ohio	7-27
8-10	Sidewalks, Hammond, La	7-27
8-10	Grading, etc., Steubenville, Ohio	7-20
8-10	Highways, New Orleans, La.	7-20
8-10	Roads, Brookville, Ind	7-20
8-10	Paving, Hastings, Ont	8- 3
8-10	Paving, etc., Spokane, Wash.	8- 3
8-10	Paving, Delaware, Ohio	8- 3
8-10	Grading, St. Clairsville, Ohio	8- 3
8-11	Grading, etc., New Philadelphia, Pa.	8- 3
8-11*	Paving, Longview, Tex	8- 3
8-11	Road improvements, Cincinnati, Ohio	7-27
8-12	Roads, Frankfort, Ind	7-27
8-12	Road, Christiansburg, Va	8- 3
8-13	Paving, etc., Napa, Cal	7-27
8-13	Street improvement, Cleveland, Ohio.	7-13
8-14	Highway, Everett, Wash	8- 3
8-14	Paving, Latrobe, Pa	8- 3
8-14*	Paving, St. Vital, M[illegible]	8- 3
8-15	Grading, etc., London, Ohio.	7-27
8-15*	Paving, Brownsville, Tex.	7-20
8-16*	Gravel road, Trenton, N. J.	8- 3
8-16*	Paving, Hillsdale, M[illegible]	8- 3
8-21	Roadway, Portland, [illegible]	8- 3
8-21	Road repair, Culpeper, Va.	8- 3
8-23	Road, Harrisburg, P[illegible]	8- 3
8-28	Repairing, etc., New York, N. Y.	8- 3
8-29	Street improvement, Caldwell, Ohio	8- 3
8-31	Road, Greenfield, Ind	8- 3
9- 2	Paving, Chile (Foreign)	7-27

Miscellaneous.

Bids close.		Noted in issue of
8- 3	Removing piers, Philadelphia, Pa.	8- 3
8- 4	Tile, ditch, Paxton, Ill	8- 3
8- 4	Terminal posts, New York.	7-27
8- 4	Ditches, Crowley, La	7-27
8- 4	Tunnel, Atlanta, Ga	7-27
8- 4*	Stone dike, Galveston, Tex.	7- 6
8- 4	Canal work, Ottawa, Ont	7-20
8- 5*	Levee, East St. Louis, Ill.	7- 6
8- 5	Culvert pipe, Omaha, Neb.	8- 3
8- 5	Fill, Dayton, Ohio	8- 3
8- 5	Drain work, Pleasant View, Ill.	8- 3
8- 7	Refrigerating machinery, Boston, Mass	8- 3
8- 7	Torpedo-boat destroyers, Washington, D. C.	6- 8
8- 7*	Dredging, New York	7-27
8- 7	Creosoted piles, Panama (U. S. Poss.)	7-27
8- 7*	Material for intake bridges, etc., Panama (U. S. Poss.).	7-13
8- 8	Telegraph cable, Australia (Foreign)	6-29
8- 8*	Elevator, Washington, D. C.	7-27
8- 8	Ditch, Clarion, Iowa	8- 3
8- 8	Levee, Columbus, Ohio	8- 3
8- 9	Storehouses and stable, New York	8- 3
8- 9	Rails and fish plates, Australia (Foreign)	7-27
8-10	Waterproofing, Atlanta, Ga.	7-27
8-10	Ditch, St. James, Minn.	7-27
8-10	Harbor work, St. John, N. B	6-22
8-10*	Channel excavation, Chicago, Ill.	7-13
8-10	Drainage canals, Tallahassee, Fla.	7-20
8-10*	Cold storage bldg., Danville, Pa.	7-20
8-10	Pier and sheds, Halifax, N. S.	8- 3
8-10	Comfort station, New York.	8- 3
8-10	Air compressor, New York.	8- 3
8-10	Sand, New York	8- 3
8-10	Subway and retaining wall, New York	8- 3
8-10	Comfort station, New York.	8- 3
8-10	Dock and bulkhead, Ossining, N. Y.	8- 3
8-11	Retaining wall, Cincinnati, Ohio	7-27
8-12	Dredge, Charleston, S. C.	7-27
8-12	Wharf trestle, Cuba (U. S. Poss.).	7-13
8-14	Electric plant, Australia (Foreign)	6-29
8-14	Electric tramway, Russia (Foreign)	7-20
8-14	Dredging, etc., Seattle, Wash.	7-27
8-14	Dams and ditches, Rapid City, S. Dak.	7-27
8-14	Concrete walls, Wheeling, W. Va.	8- 3
8-15	Levee, Columbus, Ohio	8- 3
8-15	Street signs, Columbus, Ohio	8- 3
8-15	Drainage work, Clinton, Mo.	7-27
8-15	Tugboats, Vicksburg, Miss.	7-20
8-16*	Vacuum cleaning system, New York	7-20
8-17	Broken stone, Indianapolis, Ind.	7-27
8-17	Levee, New Orleans, La.	8- 3
8-18	Earthworks, Vicksburg, Miss	8- 3
8-18	Drainage canal, Burlington, Wis.	7-27
8-19	Rock, Portland, Ore	7-27
8-19	Feeder panels, Boston, Mass.	7-27
8-19	Monument, Vincennes, Ind.	7-20
8-21*	Vacuum cleaning system, Los Angeles, Cal.	7-13
8-21	Earthwork, Memphis, Tenn.	7-27
8-21	Lift and crane, Brazil (Foreign)	7-27
8-21	Houses, Ottawa, Ont	8- 3
8-21	Dock extension, Brockville, Ont.	8- 3
8-22	Drainage, Council Bluffs, Iowa	8- 3
8-23	Telegraph, etc., material, Australia (Foreign)	7-20
8-24	Ditch, St. Paul, Minn	7-27
8-24*	Filling, Montgomery, Ala.	7-27
8-25	Floating crane, Brazil (Foreign)	7-27
8-26	Dredging, etc., New York, N. Y.	8- 3
8-28*	Tug, Duluth, Minn	8- 3
8-28*	Breakwater, Detroit, Mich.	7-27
8-29	Drainage, Brownsville, Tex.	8- 3
8-29	Melting cupola, Vallejo, Cal.	8- 3
8-29	Ditches, Brownsville, Tex.	8- 3
8-29*	Harbor work, Michigan City, Ind.	8- 3
8-31	Drilling machines, Argentina (Foreign)	7-20
9- 1	Submarine boats, Wash, D. C.	6-29 6-29
9- 1*	Dredging and filling, Minneapolis, Minn.	7-27
9- 5*	Dam, Fort Worth, Tex	7-20
9- 5	Telephone material, Australia (Foreign,	7-27
9- 5*	Dredging, Richmond, Va.	8- 3
9- 5	Dredges, snagboat, Charleston, S. C.	8- 3
9- 6	Dredge, Portland, Ore	8- 3
9- 8*	Breakwater construction, Hawaii, (U. S. Poss.)	7-13
9- 9	Tramway, Spain (Foreign).	7-27
——	Railroad work, Benson, Ariz. (Rys.)	8- 3

CURRENT PRICES OF ENGINEERING MATERIALS

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PRICE CHANGES AND THE BUSINESS OUTLOOK.

The volume of business transacted during July showed an increase compared with that of any other month this year. The outlook is more favorable and more construction work is planned. Not as much work is under contract as is usual at this time of the year, but there is apparently more work contemplated. Architects have more work in their offices than for some time and in New York City and vicinity the building outlook is more favorable. Stocks in the hands of material men are for the most part small and the low prices are stimulating consumption.

Labor is better employed than any time since last October and wages have increased. Unskilled labor is in particularly good demand.

The iron and steel industry is in better shape, as far as new orders are concerned, than for over a year, although prices are lower. The copper market is more active with a heavy drain of copper to Europe, which is reducing stocks in America.

The Canadian Reciprocity Bill may prove to be one of the most important acts of Legislation put on the statute books in years. While it will take some time for adjustment to the different price levels in the two countries, this will come about easier than supposed. Already the wholesale dealers of lumber have made their prices to conform to the new condition of things and Canadian spruce is now being sold in New York to retailers subject to the Tariff concession if the bill is favorably on acted in Canada.

The cement industry is in a very unsatisfactory condition and stocks of cement are large. Curtailment is proposed and it is difficult to see how the mills can keep on piling up a surplus of material.

Changes in the geographical distribution of trade are bound to be brought about by the Interstate Commerce decisioh regarding long and short hauls. The Pacific Coast cities will lose their preeminent advantage as jobbing centers and manufacturers on the Atlantic Seaboard will be more at a disadvantage than heretofore when competing for Western business. Another readjustment is bound to occur with the opening of the Panama Canal.

That the Sherman Law is not a dead letter is attested to by the finding of the men indicted in connection with the copper wire pool. Pools, agreements and subterfuges will be less frequent, competition will be freer and the individual will have more advantages than at any time in the last decade. The steel industry is undergoing several investigations, but the greatest complaint regarding the U. S. Steel Corporation comes from its foreign competitors. Prices are responding more to the law of supply and demand.

The favorable agricultural outlook has undoubtedly had a most beneficial effect on business. The principal crops of the country with the exceptioh of hay will be large. The cotton crop, which is the money crop of this country, will be exceedingly large anu prices are high.

Idle railway cars are decreasing and with the large stock of the old crop in farmers' hands, railway congestion is likely this fall. New railway work is very dull and the railways of the country are economizing in every known way, which almost altogether, accounts for the complaints of insufficient business.

LABOR.

Conditions have materially improved. The work offering is about equal to the supply of good laborers and foreign laborers can secure steady employment on construction work near the city. Calls are being made for men by contractors on the Barge Canal, the Aqueduct, the good roads work in New York and the Erie and Lackawanna Railways. Wages have advanced and $1.60 is now paid for Italians and Slavs for eight hours. This is an advance of 10 cts. over the wages paid in July. This balanced condition of labor and work offering is rather a surprise to many contractors, who anticipated a surplus of labor throughout the year. It is difficult to secure laborers to go any distance from New York at the present scale of wages, but one employment agency is sending a number of laborers to Canada to work on the Canadian Pacific at $1.75 a day of ten hours. The strike of the machinists in the plant of R. Hoe & Co., New York, N. Y., has been settled. The men will return to work on a compromise, their hours of work to be gradually shortened to eight hours within the next two years with no reduction in pay.

Skilled labor is in more active demand than at any time this year, but there are still many mechanics and skilled workmen of various kinds seeking employment.

The largest strike now is that at the Baldwin Locomotive Works, where several thousand men are out.

Railway employees are restless and further demands for increased wages may be made.

CEMENT, LIME AND BRICK.

Portland Cement.—The cement industry is not as satisfactory as a month ago, and there is considerable talk of curtailing operations in the Lehigh district. The condition of the present industry may be summarized by saying "too much." There is too much cement in stock, too much producing capacity and too much competition for the orders being given out. It is estimated that stocks in storage amount to nearly 12,000,000 bbls., about one-fifth of the country's annual production. It is true that the new construction work in New York will call for vast quantities of cement. The Aqueduct and Barge Canal will also need cement for years to come, but the capacity of the mills is not only sufficient to take care of this work, but for the annual increase in the consumptive demand for several years. The price of $1.48 per bbl. with an allowance of 40 cts. for bags returned, is only observed by a very few of the large producers. Cuts of 10 to 20 cts. per bbl. have been frequently made, but the keenest competitor for business and cash is not as active as heretofore. It may be pertinent to observe at this time that the selling of cement below cost, will be more serious to the large producers than to the smaller ones.

The price may be quoted at $1.38 to $1.48 New York with an allowance of 40 cts. for bags returned. In Boston $1.62 is quoted in wooden bbls. and the same price in cloth sacks, with an allowance of 40 cts. for sacks. In that market cement in paper bags can be had at $1.42. On the Pacific Coast prices range from $2 to $2.40 per bbl. The Eastern quotation represents a price of 80 to 90 cts. per bbl. in bulk at the mill.

Imported cement is unchanged at $2.42 for Alsen's and $2.43 for Dyckerhoff's.

Natural Cement.—Business is quiet and quotations continue without change at 80 cts. per bbl. in New York and $1.05 in Boston.

Plaster Blocks.—For large lots, prices are as follows:

	Weight, lbs. per sq. ft.	Price, cts. per sq. ft.
2-in.	7	6
3-in.	8½	6½
4-in.	11	7½

These blocks are made 32-in. long by 13⅓-in. wide, containing 3 sq. ft. of surface. The 2-in. blocks are solid, but the others are hollow.

Plaster boards, ⅜-in. thick, are 16 cts. per sq. yd.

Lime.—The following prices are for lots of 500 bbls., delivered in New York City: State common, per bbl., 75 cts.; Rockland-Rockport, common, 92 cts.; Rockland-Rockport, special, 300 lbs., $1.37; finished, 300 lbs., $1.47; finishing, 200 lbs., $1.02, and 350 lbs., $1.62; New Milford, $1.30.

Brick.—The makers of brick are now having trouble with the new building code. Whether they will lose as much as they think probable now is a question. In any event, the brick market is at a low ebb. Prices are so low that only the most favorably situated plants can make both ends of their books balance. Probably 40% of the brick plants on the Hudson River are idle and many of these will not open this year. Prices show practically no change from last month at $6 to $6.37½. In Newark, Raritan River brick are delivered in yard at $7.00 per thousand.

White enameled brick are held at the unchanged price of $60 per thousand for the American size (8¾ × 2¼-in. enameled surface by 4⅛-in. bed), and $70 to $75 for the English size (9 × 3-in. enameled surface by 4½-in. bed). These prices are f. o. b. Perth Amboy.

BUILDING STONE.

Blue Stone.—Business is very fair, but it is not as active as two months ago. There seems to be enough stone for sale at 18 cts. to prevent any dealers asking a higher quotation. Stocks are not large, but the supply is sufficient for present demands.

For delivery, either alongside of dock or f. o. b. cars, New York, prices are without change, as follows: Flagging, 6 cts. per sq. ft. per in. of thickness; flagging, 2½ to 3-in. thick, that will pass New York City specifications, 18 to 19 cts. per sq. ft. Sewer bottoms, 5 ft. sq. and 3-in. thick, are sold at 25 cts. per sq. ft. Curbing, 5 × 16-in., is 40 cts., and 5 × 25-in., by 5-in. thick, is 60 cts., and 6-in. thick is 65 to 70 cts. per lin. ft., 5 × 20-in. by 5-in. thick is 50 cts.

Promiscuous shapes of building and foundation stone sell at 70 to 75 cts. per cu. ft.

Granite.—The strike of the granite cutters in some of the New England quarries has curtailed shipments of the better class of granite, but the ordinary run of quarry can be had at 40 to 45 cts. per cu. ft. Pink Milford granite is unchanged in price at $1.00 per cu. ft. for promiscuous shapes.

Limestone.—Prices are unchanged at 85 cts. per cu. ft., delivered alongside of dock, New York. Dressed stone is quoted at $1.25 to $1.50 per cu. ft.

Sandstone in the rough is 80 cts. to $1 per cu. ft.

Interior Stone.—Slate flooring, 1-in. thick, can be had at 20 cts. per sq. ft. for the common or ribbon variety. Clear black sells at 35 to 40 cts., and the same price is asked for Vermont. A combination of slate and marble flooring is 30 cts. per sq. ft.

Marble floor, finished ready to lay, of Vermont marble, is 50 to 70 cts. per sq. ft.; Italian marble, 70 to 90 cts. Tennessee marble can be had at 65 cts. Ordinary stair work, such as slate steps, are quoted at 24 cts. per sq. ft.

CRUSHED STONE, SAND AND GRAVEL.

Crushed Stone.—All the sellers of crushed stone are waiting with interest to see how rapidly the work on the subways will progress. It has been so long delayed that injunctions are feared, and then, too, it must be remembered that the contracts let are only for a small amount of work. Stone for roadmaking purposes, however, is in better demand and this kind of work has been pushed rapidly.

Prices are as follows: For 1½-in. stone, 85 to 95 cts.; for ¾-in. stone, 90 cts. to $1. Screenings are likewise sold at the same price. These quotations are for full cargo lots of 500 cu. yds. delivered alongside of dock New York City. In Boston quotations are unchanged from last month as follows: ¾-in., 85 cts.; 1½-in. stone is 75 cts. and 2½-in. is 65 cts. These prices are f. o. b. quarry.

Sand.—The market for sand is quiet and there seems to be little business of the larger sort. Sales are made at 25 cts. per cu. yd. delivered alongside of dock New York in full cargo lots. For small quantities or in places where less than full cargo lots can be delivered, prices vary from 35 to 40 cts. per cu. yd. In Newark sand is selling at 40 cts. per cu. yd.

White quartz sand is 60 cts. per cu. yd. and white quartz grit 75 cts. per cu. yd. All of these prices are for delivery alongside of dock, New York, and for full cargo lots of 500 yds.

In Boston sand sells at 35 cts. per cu. yd., to which is added the freight of about 50 cts.

Gravel.—The business being transacted by the sellers of gravel is not up to normal, and it is much less than usual at this season of the year. Prices are fairly firm, but no large business is expected this summer.

Prices are without change at 75 to 85 cts. per cu. yd. delivered alongside dock, New York. These prices rule for full cargo lots of 500 cu. yds. White quartz roofing gravel is $1.25 to $1.35 per cu. yd.

IRON AND STEEL.

Pig Iron.—Prices are more or less stationary, but the buying of iron is slightly larger and sentiment has improved, especially during the latter part of July. The United States Steel Corporation is now operating to approximately 71% of capacity compared with 72% last week, 68% a month ago and 58% the early part of June. It is well known that the railroads are buying only such material as is absolutely needed, and in that respect it is considered remarkable that the pig iron market, and particularly the steel industry, shows the activity it does. It has frequently been pointed out in these reviews that the buying of the railways was not the important factor of the steel companies that it was ten years ago, and this is becoming more apparent day by day.

New railroad construction is far less in proportion to the entire output of steel and iron than probably ever before, and, while the steel companies miss the large buying of the railways, they have a more established market in diversified lines by a multitude of consumers. A perceptible improvement in the demand for iron is noted in the Western districts, largely on account of the crop prospects. Most of the markets West of the Alleghenies report an improvement in the volume of business and more activity in many lines.

Consumers are taking iron on contracts without hesitation, and there is less iron held up than a month ago.

For lots of 100 gross tons and over, f. o. b. points named, quotations are as follows: Cincinnati, Southern foundry No. 1, $13,75 to $14; Southern foundry No. 2, $13.25 to $13.50; Southern foundry No. 4, $12.50 to $12.75. Philadelphia, Eastern Pensylvania No. 2X foundry is $15 to $15.25, and Eastern Pennsylvania No. 2 plain foundry, $14.75 to $15. In Chicago, Northern foundry No. 2 is $14.50 to $15; Southern foundry No. 2, $14.35 to $14.60. In Pittsburg, Bessemer iron is $15.90 and basic $13.90. These quotations include the 90 ct. freight rate from the Valley to Pittsburg. In New York, Northern foundry No. 2X is $15 to $15.25; Southern foundry, No. 2, $14.25 to $14.75. In Birmingham the price of No. 2 Southern is unchanged at $10.

Steel Rails.—The buying of rails has fallen off somewhat compared with a month ago, but export orders continue large. During the last week Canadian railways purchased 33,000 tons of rails in the United States, and it is evident that similar purchases must continue for some time to come. That the United States Steel Corporation is making itself felt as a competitor in the world's markets is attested to by more than one authority. In a recent issue of the leading iron and steel paper in Great Britain, there is a sharp attack made on the methods of the Steel Corporation, particularly regarding its policy, so called, of developing an export trade at the expense of its domestic consumers. The sales of rails made by this company during this year to foreign consumers will probably constitute a new record. One or two other facts give striking light on the subject. The new steel mill at Ensley, Ala., is one of the most complete mills in the country. It is arranged for manufacturing almost any kind of iron and steel. Its geographical location with regard to water transportation is particularly favorable and will be more so with the opening of the Panama Canal. The production of rails of all kinds in 1910 was 3,636,031 tons, an increase of about 20% compared with the previous year and about double that of 1908.

Quotations are as follows for lots of 500 tons and over: Standard sections, 50 to 100-lbs. per yard, $1.25 per lb.; 40 to 45 lbs., 1.16 cts.; 30 to 35 lbs., 1.20 cts.; 16, 20 to 25 lbs., 1.21 cts., and 12-lb. rails, 1.25 cts. Relaying rails are higher in New York, at $20.50 to $21.50 per gross ton. In Chicago, standard sections, subject to inspection, have had a sharp advance and are now quoted at $24.

Track Supplies.—The demand is only fair and prices are not especially firm. This is largely on account of the lack of new work and a spirit of economy regarding the use of old materials.

Quotations are unchanged, at $1.60 per 100 lbs. Pittsburg. In Chicago prices are likewise without change, at $1.65 to $1.70. The extras are unchanged and repeated from last month as follows:

Railroad Spikes.		Cents.
3, 3½, 4, 4½ and 5 × ½	Extra	.10
3½, 4 and 4½ × 7/16	Extra	.20
3, 3½, 4 and 4½ × ⅜	Extra	.30
2½ × ⅜	Extra	.40
2½, 3 and 3½ × 5/16	Extra	.60
2 × 5/16	Extra	.80

Boat Spikes.		
⅝ in. square, 8 to 16 in. long	Extra	.15
⅝ in. square, 2 to 16 in. long	Extra	.15
½ in. square, 6 to 16 in. long	Extra	.15
7/16 in. sq., 6 to 12 in. long	Extra	.20
⅜ in. sq., 4 to 12 in. long	Extra	.30
5/16 in. sq., 4 to 8 in. long	Extra	.45
¼ in. sq., 4 to 8 in. long	Extra	.75
¼ in. sq., 3 to 3½ in. long	Extra	1.00

Track bolts with square nuts are 2.15 to 2.25 cts. per lb., base in carload lots, Chicago.

Structural Steel.—A large amount of work is being contracted for and figuring is going on rapidly. At the same time, competition is especially keen and some very low prices are being made for fabricated materials. It is quite the custom now to have almost every job re-figured with considerable saving in the resultant bid. In spite of the large work under contract, the fabricating shops are not busy. To explain this one has to recall the period, not so many years ago, when the fabricators were especially independent in their ideas regarding prices and delivery because their shops were filled. Since that time, the large profits have proved an attractive bait, every shop has increased its facilities to a marked degree and outside competition has come into the field, which undoubtedly are the reasons for the low prices being named today. Structural steel work for the New York subways will be closed in the near future, at least for those few sections which have already been placed under contract. The most conspicuous order recently was for 20,000 tons of shapes for Canadian delivery.

The following quotations are named in cts. per lb., f. o. b. Pittsburg: I-beams and channels, 3 to 15-in., 1.35 to 1.40 cts.; over 15-in., 1.50 cts.; H-beams, over 8-in., 1.60 cts.; angles, 3 to 6-in., inclusive, 1.45 cts.; angles over 6-in., 1.50 cts.; zees, 3-in. and over, 1.45 cts.; angles, channels and zees under 3-in., 1.45 base and full extras; deck beams and bulb angles, 1.70 cts.; hand rail tees, checkered and corrugated plates, 1.75 to 1.90 cts.

Chicago store prices in cents per lb. are as follows: Angles, 3 to 6-in., 1.75 to 1.90 cts.; over 6-in., 1.85 to 1.95 cts.; I-beams and channels, 1.75 to 1.90 cts. In San Francisco, prices from store continue without change at 2.70 cts. base.

Cast-Iron Pipe.—Fewer orders are being received by the manufacturers of pipe. Most of the orders now being taken are for delivery on the Pacific Coast, where a large amount of work is underway particularly in the substitution of cast-iron for wood stave pipe. In the East the manufacturing facilities are considerably in excess of trade requirements, and by some, at least in the cast-iron pipe trade, it is felt that the plants may run to full capacity only during periods of exceptional demand, but for the most part the plants operating East of the Alleghenies can do little better than manufacture at about, 50% capacity. Quotations for the most part are unchanged, except that prices are 50 cts. to $1 a ton lower in Alabama. With the higher quotations for pig iron, manufacturers are not disposed to make any especially low quotations.

Prices are as follows:

Birmingham, Ala., 4 to 6-in., $22; 8 to 12-in., $21; over 12-in., $20.

Chicago, 4-in., $25.50; 6 to 12-in., $24.50; 16-in., $24.

New York, 6-in., $21 to $22.

San Francisco, 4-in., $35; 6 to 12-in., $34.

Gas pipe is held $1 per ton higher in all markets.

Plates.—The demand for plates has not been active, but there is no doubt that more car work is in sight than for nearly a year. The Erie order for 3,000 cars, noted last week, has not been placed yet, but probably will within a week. In addition, the Illinois Central is in the market for 2,000 cars, the Wabash for 1,000, the Atlantic Coast Line for 1,000, the Missouri Pacific for 2,000 gondolas and 500 flat cars. Shipbuilding work is practically neglected.

The base price of 1.35 cts. for wide plates continues: Plates ¼-in. thick, 6¼ to 100 ins. wide, 1.35 to 1.40 cts.; ¼ to 3/16 ins. thick, 1.45 to 1.50 cts.; 3/16 ins. and thinner, including No. 8 gage, 1.50 to 1.60 cts.; Nos. 8, 9 and 10 gage, 1.65 to 1.70 cts. All these prices are per lb. f. o. b. mill. In Chicago, store prices are 1.80 to 1.85 cts.

Old Materials.—Quotations have moved up slightly and the demand shows an improvement. Rolling mills are not yet willing to place orders for large amounts, but they are watching the market with considerable care. On the other hand, those having scrap for sale believe the present prices absurdly low, and in consequence are holding on to material. Prices in New York per gross ton are as follows: Heavy melting steel scrap, $10.75 to $11; No. 1 yard wrought, $11 to $12; No. 1 railroad wrought, $12.75 to $13.25; pipes and flues, $9.50 to $10; cast borings, $4.75 to $6.25; machinery cast, broken up, $11 to $11.50; stove plate, $8.50 to $9.

In the Chicago market there is more animation, but prices show little improvement. The following quotations are named per gross ton: Re-rolling rails, $12.25 to $12.50; heavy melting steel scrap, $10.50 to $11. For materials that are sold by the net ton, quotations are as follows: Miscellaneous railroad wrought, $10 to $11.25; machine shop turnings, $6.25 to $6.75; No. 1 cast scrap, $10.25 to $10.75; pipes and flues, $8 to $8.50; railroad malleable, $10 to $10.50; agricultural malleable, $9.25 to $9.75.

In Pittsburg dealers are more anxious bidders than consumers and somewhat higher prices are ruling. As has been noted in other markets, consumers are holding back scrap in the expectation of higher prices in the near future. The following quotations are per gross ton f. o. b. Pittsburg: Re-rolling rails, $13.75 to $14; No. 1 foundry cast, $13.25 to $13.50; No. 2 foundry cast, $12.75 to $13; old grate bars, $10.75 to $11; car wheels, $13.50 to $13.75; bundled steel scrap, $11.50 to $12.

Rivets.—Business is quiet, but shipments are running larger than a month ago. Structural rivets are sold at $1.70 to $1.75 base and boiler rivets at $1.80 to $1.85 base. Structural rivets, ¾-in. and larger, take base price; cone headed boiler rivets, ¾-in. and larger, take base price of boiler rivets; ⅝ and 11/16-in. take an advance of 15 cts., while ½ and 9/16-in. take an advance of 50 cts. Lengths shorter than 1-in. take an advance of 50 cts.

Roofing Corrugated.—Inquiries are larger and in the West there is a notable increase in sales. Some orders are being taken for very prompt shipments. Price are unchanged as follows per 100 sq. ft. of roofing surface, in carload lots f. o. b. Pittsburg: No. 28, painted, $1.40; galvanized, $2.55; No. 27, painted, $1.55; galvanized, $2.60; No. 26, painted, $1.65; galvanized, $2.65; No. 24, painted, $2.10; galvanized, $3.15; No. 22, painted, $2.60; galvanized, $3.70.

Corrugated sheets from store New York are held as follows per 100 sq. ft. of roof surface: No. 28, painted, $2.50; galvanized, $3.65; No. 26 painted, $2.85; galvanized, $3.90; No. 24 painted, $3.75; galvanized, $4.70.

Steel Castings.—Prices continue without change. Open hearth steel castings, weighing from 100 to 500 lbs., are 3½ to 5 cts. per lb. Crucible castings, weighing from 100 to 500 lbs., are 7½ to 9 cts. per lb.

Castings Gray Iron.—The volume of business continues below normal. Building castings are to be had at 1.62½ to 2 cts. per lb., depending on the size of the order and shape of the casting. Stair work is 2 to 2.50 cts. per lb. Rough castings, such as foundation pieces, sewer work, and similar heavy pieces, are 1.50 to 1.75 cts. per lb.

Freight Rates.—The freight rates on finished steel products, from the Pittsburg district, including plates, structural shapes, merchant steel and iron bars, pipe, fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows, in cts. per lb.: Albany, 16; Buffalo, 11; Boston, 18; Baltimore, 14½; Canadaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Denver, Colo., 85½; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

Sheets.—Further improvement in the volume of business was made during July. Many filling in orders were received in the latter part of the month calling for prompt shipments.

Prices f. o. b. Pittsburg are as follows:

	Cts. per lb.	
	Black.	Galvanized.
Nos. 10 and 11......	1.65	2.00
Nos. 12, 13 and 14...	1.70	2.10
Nos. 15, 16 and 17...	1.75	2.25
Nos. 18, 19, 20 and 21	1.90	2.40
No. 22..............	1.85	2.40
Nos. 23 and 24......	1.85	2.50
Nos. 25 and 26......	1.95	2.70
No. 27..............	2.00	2.85
No. 28..............	2.00	3.00
No. 29..............	2.05	3.10
No. 30..............	2.05	3.30

Store prices Chicago are as follows:

	Cts. per lb.	
	Black.	Galvanized.
No. 10..............	2.20	2.75
No. 12..............	2.20	
No. 14..............	2.25	
No. 16..............	2.35	2.85
Nos. 18 to 22.......	2.50	3.00
No. 24..............	2.55	3.10
No. 26..............	2.65	3.30
No. 27..............	2.75	3.45
No. 28..............	2.95	3.60
No. 30..............	3.15	4.05

Merchant Pipe.—Business is active, prompt shipments are being made and prices continue without change. The order of the Ohio Fuel Supply Co. for 26 miles of 16-in. and five miles of 12-in., noted last month, has been placed.

Discounts are unchanged as follows:

	Black.	Galvanized.
¾ to 1½-in. Butt weld..	79	69
2-in. Lap weld..........	76	66
2½ to 4-in. Lap weld...	78	67
4½ to 6-in. Lap weld....	77	67
7 to 12-in..............	75	59

At these discounts the net prices of pipe per ft. are as follows:

	Steel Pipe in Cts. per ft. f. o. b. Mill.	
	Black.	Galvanized.
¾-inch.........	2.43	3.58
1 -inch.........	3.47	5.12
1¼-inch.........	4.74	7.00
1½-inch.........	5.69	8.33
2 -inch.........	8.65	12.20
2½-inch.........	12.70	19.80
3 -inch.........	16.60	25.60
4 -inch.........	23.70	36.70
5 -inch.........	33.40	48.00
6 -inch.........	43.20	62.00
7 -inch.........	54.00	78.00
8 -inch.........	65.00	93.00
9 -inch.........	78.00	112.00
10 -inch.........	92.00	132.00
11 -inch.........	104.00	149.00
12 -inch.........	114.00	162.00

Bars and Merchant Shapes.—The tone of inquiries received indicates that consumers feel more confident than for many months. Prices are unchanged but the volume of business shows an increase.

Quotations from store New York are sa follows:

	Cts. per lb.
Refined iron:	
1 to 1⅞-in. round and square	1.70
1½ to 4-in. × ⅜ to 1-in......	
1½ to 4-in. × ¼ to 5-1......	1.80
Rods:	
⅝ and 11/16 round & square	1.80
Angles:	
3-in. × ¼-in. and larger......	1.90
3-in. × 3/16-in. and ⅛-in....	2.30
1½ to 2½-in. × ⅛-in.......	2.05
1½ to 2¾-in. × 3/16-in. and thicker	1.95
1 to 1¼ × 3/16-in..........	2.05
1 to 1¼ × ⅛-in.............	2.10
⅞ × ⅛-in..................	2.20
¾ × ⅛-in..................	2.25
⅝-in. × ⅛-in..............	3.45
½ × 3/32-in...............	3.90
Tees:	
1-in.	2.35
1¼-in.	2.20
1½ to 2½ × ¼-in..........	2.00
1½ to 2½ × 3/16-in........	2.10
3 in. and larger...........	3.95
Beams	1.90
Channels, 3-in. and larger.....	1.90
Bands, 1½ to 6 × 3/16 to No. 8.	2.10
"Burden's Best" Iron, base price	3.15
Burden's "H. B. & S." iron, base price	2.95
Norway bars	3.60,
Bessemer machinery	1.90
Cast steel, base	7.00
Special cast steel, base.........	14.00

Piling, Sheet Steel.—Prices are without change at 1.60 cts. per lb., f. o. b. Pittsburg.

Wire Rope.—Prices are unchanged. The discount to the larger trade is 42½ and 5% from list for galvanized and 50 and 5% from list for bright. The net prices of bright wire rope are as follows:

	Price per foot.		
Diameter, ins.	Cast steel.	Crucible steel.	Plow steel.
2½.............	$1.05	$1.24	$1.46
2¼.............	.85	1.05	1.22
2	.57	.65	.76
1¾.............	.44	.54	.64
1½.............	.32	.39	.45
1¼.............	.23	.28	.32
1	.15	.18	.21
¾.............	.10	.11	.13
⅝.............	.07	.09	.10
½.............	.06	.07	.07

Lag Screws.—The keen competition has forced prices down and cone point lag screws are now sold at a discount of 80% from list. The net prices are as follows.

	Diameter in inches—Net price per 100.		
Length.	½-in.	¾-in.	1-in.
3½-in...........	$1.04	$2.12	$4.49
4 -in...........	1.11	2.26	4.66
4½-in...........	1.18	2.40	4.92
5 -in...........	1.25	2.47	5.18
6 -in...........	1.40	2.82	5.70
7 -in...........	1.59	3.10	6.22
8 -in...........	1.68	3.38	6.74
9 -in...........	1.83	3.66	7.26
10 -in...........	1.87	3.94	7.78
11 -in...........	2.11	4.22	8.30
12 -in...........	2.26	4.59	8.82

Tin Plate.—All of the tin plate makers of the country are operating to better capacity than in several months; the United States Steel Corporation has about 75% of its mills in operation and the independent makers are operating to about 80% of maximum capacity.

Prices are unchanged; Terne plates or tin-plates used for roofing purposes are sold by the box of 112 sheets. Store prices in New York are unchanged as follows: $8.70 per box for 20 × 28-in. I C plates with an 8-lb. coating; plates of the same size with a 15-lb. coating are $10.60; 20-lb. coating, $13.20, and 40-lb. coating, $16.70.

Chain.—Prices are unchanged and the following are named for cask lots of 500 lbs. to consumers. The quotations are per 100 lbs. f. o. b. Pittsburg.

Sizes in ins.	Proof.	BB.	BBB.
3/16	$8.10	$9.35	$9.85
¼	5.55	6.80	7.30
5/16	4.55	5.80	6.30
⅜	4.00	5.25	5.75
7/16	3.70	4.95	5.45
½ and 9/16......	3.50	4.75	5.25
⅝	3.40	4.65	5.15
¾	3.30	4.55	5.05
⅞	3.20	4.45	4.95
1	3.10	4.35	4.85
1⅛ and 1½......	3.20	4.45	4.95

Prices for hand-made chains are unchanged:

Size in inches.	BBB crane chain.	BBB crane, dredge hoisting or steam shovel hoisting chain.	Special "Warwick" crane, hoisting steam shovel hoisting & dredge hoisting chain.	Special "Trident" crane, steam sh'v'l hoisting & dredge hoisting chain.
⅝	$7.95	$8.20	$9.15	$9.15
¾	7.15	7.45	8.45	8.45
⅞	7.67	6.90	7.90	....
1	6.15	6.40	7.45	....
1⅛	5.75	5.95	6.90	....
1¼	5.65	5.90	6.85	....
1⅜ to 1⅞..	5.55	5.75	6.80	....

Coke.—The output is slightly larger than a month ago but smaller than in the early part of June. The production, estimated by the "Connellsville Courier" is 277,000 tons weekly, compared with 271,000 in July and 280,000 in June. For prompt shipments prices are easier at $1.50 to $1.55 per net ton. For shipments extending through the year $1.65 to $1.75 is the contract price. The price of 72-hr. foundry coke is unchanged at $1.85 to $2 for prompt, but is lower at $2 to $2.25 on contracts extending over the year.

Spiral Riveted Pipe.—Prices continue unchanged from the last report. The prices given below are f. o. b. factory, freight equalized with New York City, being figured at a discount of 50, 10 and 10% from list. They are for orders amounting to about $250. For large orders of several carloads, prices are from 12½ to 20% cheaper.

		Net price per 100 ft. With bolted joints complete.		
Diameter in ins.	*Thickness of steel. Birmingham wire gage.	Plain.	Asphalted.	Galvanized.
3	20	$21.80	$14.21	$20.70
4	18	19.76	21.48	30.74
5	18	23.40	23.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	54.16	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.30
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.89	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	226.44
20	12	183.79	193.30	248.39
22	12	200.48	210.64	269.21
24	12	219.92	231.07	293.99
26	10	280.20	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	399.15	430.64

*Made in both lighter and heavier gages at corresponding differences in price.

Nails.—The feature of the business most worthy of note are the orders for prompt shipments, the orders are for small lots but all indications point to depleted stocks. Wire nails in Pittsburg are sold at $1.75 per keg base in carload lots to retail merchants. In less than carload lots, an advance of 10 cents per keg is demanded. In New York wire nails are sold from store at $2.00 per keg. Cut nails are now $1.65 per keg in carload lots from Pittsburg, but the price in New York has been reduced 5 cts. per keg, and the base price is now $2.00. All these prices are per 100 pounds.

Wire.—Business is quiet and the demand small. The following prices are named for carload lots of wire: Annealed, $1.55; galvanized, $1.85. Less than carload lots are sold at an advance of 10 cts. per 100 lbs. Galvaized barb wire is $2.05 and painted $1.75.

Swedish Steel.—Business is quiet. Prices are without change. Drill steel, either round, hexagon or octagon, is 6 cts. per lb. for all sizes, ⅝ to 2 ins. For sizes 2⅛ to 3 ins., 7 cts. is quoted, and 3⅛ to 4 ins. is 7½ cts.

Hollow drill rod is held at 12½ to 15 cts. for the imported.

Anvils of Swedish steel are held at 9 to 9½ cts. per lb. They weigh from 80 to 600 lbs.

Switch Points. — The following prices are named, f. o. b. mill, for switch points in lots of ten or more pair: for 60-lb. rail, 10-ft. points, $16.25; 15-ft. points, $17.50 for 70-lb. rail; 10-ft. points, $18; 15-ft. points, $25; for 80-lb. rail, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, 15-ft. points, $30.50; for 100-lb. rail, $33.50. All of the above are furnished with three rods, except the 10-ft. points for 60 or 70-lb. rail, which have only two.

Bolts.—Prices are unchanged from last month. The discount on common carriage bolts to the trade and large consumers is 75 and 10% on bolts ⅜ × 6-in. and smaller. On larger and longer bolts the discount is 70 and 10%. At these discounts the net prices are as follows:

CARRIAGE BOLTS.

	Diameter inches. Net price per 100.		
Length ins.	⅜	½	¾
4.............	$0.62	$0.99	$2.34
5.............	0.68	1.13	2.57
6.............	0.75	1.23	2.84
7.............	0.99	1.35	3.05
8.............	1.08	1.46	3.32
9.............	1.16	1.58	3.55
10.............	1.24	1.70	3.80
12.............	1.42	1.94	4.30
14.............	1.59	2.18	4.80
16.............	1.77	2.42	5.28
18.............	1.94	2.65	5.78
20.............	2.10	2.88	6.30

Frogs.—For mill shipments of ten or more, prices are as follows: Bolted frogs, No. 7, for 60-lb. rail, $15; for 70-lb. rail, $16.50; for 80-lb. rail, $18; No. 8 frogs for 90-lb. rail, $21; for 100-lb. rail, $23. Plate frogs, No. 7, riveted to ⅝-in. plate for 60-lb. rail, $18; for 70-lb. rail, $20; for 80-lb. rail, $21.50. No. 8 frogs bolted to a ¾-in. plate for 90-lb. rail are $25.50; for 100-lb. rail, $27.50.

REINFORCING MATERIAL.

Interlocking Plats.—For interlocking steel plates, of 24 gage black steel, f. o. b. mill Central Ohio, the following prices are named:

Length.	Per 100 sq. ft. Weight.	Price. Flat Sheets.
Under 4 ft......	100 lbs.	$11.00
4 to 6 ft......	160 lbs.	10.00
6 to 8 ft......	160 lbs.	9.50
8 to 10 ft......	160 lbs.	9.00
10 ft......	160 lbs.	8.50

Curved sheets are held at an advance of $11 per 100 sq. ft. over flat.

Triangular Mesh. — Business is well ahead of last year. A reduction of about $3 per ton has been made to correspond to the lower prices of bars. The following quotations are per 100 sq. ft. in lots of the size named, f. o. b. mill in Pittsburg district:

Price per 100 sq. ft.

Style No.	Cross sec. area per ft. width.	Carload lots.	Less than carloads and over 10,000 sq. ft.
*4	.102	$ .97	$1.18
5	.077	.77	.94
6	.058	.61	.74
*7	.041	.47	.58
*23	.170	1.62	1.98
24	.142	1.40	1.71
25	.124	1.24	1.51
*26	.110	1.13	1.38
*27	.085	.92	1.13
28	.066	.77	.94
29	.049	.63	.77
31	.261	2.39	2.92
32	.225	2.07	2.53
33	.196	1.85	2.26
34	.146	1.42	1.73
35	.109	1.13	1.38
36	.075	.83	1.02
*38	.380	3.40	4.15
39	.325	2.93	3.58
40	.283	2.57	3.14
41	.208	1.96	2.39
*42	.151	1.49	1.82
43	.101	1.06	1.29

This material is made in regular widths of 18, 22, 26, 30, 34, 42, 46, 50, 54 and 58 ins. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special length is charged extra.

Bars. Concrete Reinforcing.—Business is more active. The base price of bars is 1.25 cts. per lb., Pittsburg, in carload lots. The extras on different sizes are as follows:

	Cts. per lb. Plain.	Cts. per lb. *Deformed.
¾-in. and larger	1.25 to 1.35	1.30 to 1.40
⅝-in.	1.30 to 1.40	1.35 to 1.45
½-in.	1.35 to 1.45	1.40 to 1.50
⅜-in.	1.50 to 1.60	1.55 to 1.65
¼-in.	1.75 to 1.85	1.80 to 1.90

Bar from stock, Pittsburg, are usually cut to the required length without extra charge. Prices per lb. are as follows:

	Cts. per lb. Plain.	Cts. per lb. *Deformed.
¾-in. and larger	1.45 to 1.55	1.55 to 1.65
⅝-in.	1.50 to 1.60	1.60 to 1.70
½-in.	1.55 to 1.65	1.65 to 1.75
⅜-in.	1.70 to 1.89	1.80 to 1.90
¼-in.	1.95 to 2.05	2.05 to 2.15

*The price of deformed bars varied according to the shape, and some are held much higher than these prices.

Expanded Metal.—Quotations are without change as follows:

Mesh.	Gage-stubbs.	Designation.	Weight per sq. ft.	Sectional area per ft. width.	Price per sq. ft. in cts. Carload.	Price per sq. ft. in cts. 10,000 sq. ft. to carload.
½-in.	18	Standard	.74	.209	3.71	4.04
¾-in.	13	Standard	.80	.225	3.69	4.03
1½-in.	12	Standard	.70	.207	3.43	3.76
2 -in.	12	Standard	.56	.166	3.20	3.48
3 -in.	13	Standard	.28	.087	1.32	1.44
3 -in.	10	Light	.50	.148	1.55	1.69
3 -in.	10	Standard	.60	.178	1.80	1.97
3 -in.	10	Heavy	.90	.267	2.46	2.69
3 -in.	10	Ex heavy	1.20	.356	3.18	3.47
3 -in.	6	Standard	1.38	.400	3.85	4.20
3 -in.	6	Heavy	2.07	.600	5.64	6.16
4 -in.	16	Old Style	.42	.093	1.78	1.94
6 -in.	4	Standard	.84	.245	2.42	2.64
6 -in.	4	Heavy	1.26	.368	3.38	3.68

CLAY PRODUCTS.

Hollow Tile.—The demand continues good.

Prices are without change for hollow wall building tile, f. o. b. factory, Perth Amboy, N. J., as follows:

Size.	Price per block, in cts.
4 × 12 × 12-in.	5.25
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	10.5
10 × 12 × 12-in.	10.5
12 × 12 × 12-in.	12.1

Fireproofing partition blocks are unchanged as follows:

Size.	Price per block, in cts.
2 × 12 × 12-in.	4.4
3 × 12 × 12-in.	4.4
4 × 12 × 12-in.	5.
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	8.8

These prices are for what would be considered small orders—approximately carload lots. For quantities which exceed $1,000 worth of material concessions will be made.

Duct Telephone.—Small lots are sold at 4½ to 5 cts. per duct ft., but considerable concessions are made for desirable orders.

Roofing Tile.—Prices are steady and continue without change. The best grade for promenade roofing tile in flat blocks for high-grade roofs is sold at $20 per M. for run of kiln, and $30 per M. for selected. A cheaper form of tile with a smooth surface can be had at $10 to $12, but it is not suitable for roof gardens. These prices are for 9 × 9-in. blocks, f. o. b. factory. It requires 258 blocks to lay 100 sq. ft. of roof surface and, in consequence, the price per 100 sq. ft. of roof surface would be $4 to $5 for the smooth blocks; $7.82 for run of the kiln, and $10.73 for the selected.

Vitrified tile, unglazed, of the French or Spanish type is sold at approximately $8.50 per 100 sq. ft. of roof surface, f. o. b. factory. Glass tiles are sold at 60 cts. each. It requires 183 of these for 100 sq. ft. of roofing.

Flue Lining.—Prices continue without change. The discount from list, f. o. b. mill, is 85%. Delivered in New York, in small lots, they can be had at 78%. Based on a discount of 85% at the mill, net prices are as follows:

	Weight in lbs.	Price per ft.
4½ × 8½-in.	14	$0.04½
4½ × 13 -in.	20	.068
4½ × 18 -in.	40	.15
6 × 12 -in.	22	.075
7 × 7 -in.	15	.053
8½ × 8½-in.	18	.068
8½ × 13 -in.	28	.098
8½ × 18 -in.	45	.135
12 × 16 -in.	45	.15
13 × 13 -in.	38	.128
13 × 18 -in.	57	.18
14 × 16 -in.	60	.165
16 × 16 -in.	65	.24
16 × 20 -in.	80	.30
18 × 20 -in.	75	.30

Sewer Pipe.—Quotations are without change. The discounts applying to the Eastern list are as follows: For all sizes up to and including 24-in., 84% discount; for 27 and 30-in., 76% discount; for 33 and 36-in., 71% discount.

At these discounts the net prices per ft. for carload lots, f. o. b. factory, are as follows:

3-in.	$0.032
4-in.	.04
5-in.	.048
6-in.	.064
8-in.	.087
10-in.	.128
12-in.	.16
15-in.	.215
18-in.	.30
20-in.	.36
21-in.	.43
22-in.	.48
24-in.	.52
27-in.	1.09
30-in.	1.22
33-in.	1.78
36-in.	2.04

MILL SUPPLIES.

Shafting.—There is more activity, a part of which is due to the lower prices that have been made for finished materials.

Discounts are 60% off list for carloads and 55% for less than carloads. The following net prices per foot are based on the discount of 55%: ¾-in., 3.75 cts.; 1-in., 6.65 cts.; 1¼-in., 10.40 cts.; 1½-in., 13.50 cts.; 1¾-in., 18.30 cts.; 2-in., 23.70 cts.; 2¼-in., 31.45 cts.; 2½-in., 37.53 cts.; 2¾-in., 45.40 cts.; 3-in., 54.13 cts; 3½-in, 82.60 cts.; 4-in., $1.15; 4½-in., $1.50; 5-in., $2.10; 5½-in., $2.74; 6-in., $3.48.

Belting.—No changes have been made in discounts, business is only fairly active.

Discounts on rubber belting are as follows: Best grades, 40%; standard, 40 and 10%; and competition, 60 and 10%. The discounts on leather belting are unchanged as follows: Extra heavy, 60%; heavy, 60 and 5%; medium, 70%; light, 70 and 5%; standard, 70 and 10%.

The following net prices per foot of leather belting are computed at the above discounts. The price of rubber belting is as stated, unchanged from last month, and the prices may be found on page 11 of issue of July 6.

LEATHER BELTING, PRICE PER FOOT.

Width, ins.	Extra heavy.	Medium	Standard.
1	$0.095	$0.072	$0.065
1½	.144	.108	.097
2	.192	.144	.12
2½	.24	.18	.162
3	.29	.215	.194
3½	.35	.252	.227
4	.385	.29	.26
5	.48	.36	.325
6	.58	.433	.39
7	.68	.50	.455
8	.77	.58	.52
9	.86	.65	.58
10	.96	.72	.65
11	1.05	.79	.71
12	1.15	.87	.78
14	1.35	1.01	.91
16	1.53	1.15	1.03
18	1.73	1.30	1.17
20	1.93	1.45	1.30
22	2.10	1.58	1.42
24	2.30	1.73	1.55
26	2.50	1.88	1.69
30	2.87	2.16	1.95
36	3.97	2.60	2.34
48	4.62	3.48	3.10

Chain Belting.—Prices continue unchanged.

From 3 HP. to 10 HP. 30-in. centers complete, with two sprockets, $7 to $8 per HP.; from 10 HP. to 25 HP., 36-in. centers complete, $5 to $6 per HP.; from 25 HP. to 100 HP., 60-in. centers complete, $4 to $5 per HP.; from 100 HP. to 500 HP., 72-in. centers complete, $3 to $4 per HP.

Packing.—Prices continue without change. The following quotations are for small lots in original packages.

Asbestos wick and rope, 13 cts.; sheet rubber, 11 to 13 cts.; pure gum rubber, 40 to 45 cts.; red sheet, 40 to 50 cts. Cotton packing can be had at 16 to 25 cts.; jute at 3¼ to 3½ cts., and Russian at 9 to 10 cts.

Lubricating Oils.—Quotations continue without change, the following figures being named for 5-bbl. lots:

	Cts. per gal.
*Cylinder, dark	20 to 27
*Cylinder, steam, refined	14 to 22
Neutral Oils, filtered:	
Stainless white, 32 to 34 gravity	28 to 29
Lemons, 33 to 34 gravity	17 to 19
Dark, 32 gravity	15 to 18
Crank Cast oil	15 to 17

*Prices are according to test.

High-Speed Steel.—The demand is less than last month. Prices are without change at 50 to 75 cts. per lb.

Fire Hose.—Prices of hose are unchanged. The standard grade of underwriters' cotton rubber-lined hose, 2⅝-in. diameter, warranted, 350 lbs. pressure, is sold in 50-ft. lengths, complete with couplings, at 65 cts. per ft. Common hose, 2½-in. diameter, tested to 200 lbs. pressure, is 35 cts. per ft.

Cotton Waste.—The following prices are named on cotton waste in bales of 100 to 500 lbs.:

No. 1 White Picked Cotton Waste, 9¾ cts. per lb.; No. 3 is 8⅞ cts.; No. 1 Colored, 6½ cts.; No. 3 Colored is 5½ cts.

LUMBER.

Long Leaf Yellow Pine.—The market is steady and the volume of business shows an improvement. Prices continue unchanged, and for delivery from yard in New York and vicinity, for material classed as "Merchandise" under the 1905 rules of the Association, prices are as follows:

Prices Per Thousand Feet in Yard, New York.

	Length. 20 ft. base.	Length. 21 to 25 ft.	Length. 26 to 30 ft.	Length. 31 to 35 ft.
2 in wide and under by 8 in. thick and under	$31	$32	$33	$34
10 in. wide by 10 in. thick and under	33	34	35	36
12 in. wide by 12 in. thick and under	36	37	38	39
14 in. wide by 14 in. thick and under	43	44	46	48
16 in. wide by 16 in. thick and under	45	46	47	48

For pieces longer than 35 ft. and less than 40 ft., add from $4 to $8 to base price.

Lath.—In Boston, 1⅝-in. lath sells at $3.70 to $3.75 and 1½-in. at $3.40 to $3.50.

Spruce.—In Boston wholesale prices are as follows:

	Per 1,000 ft.
9-in. and under	$23.50 to $24.00
10 to 12-in.	23.50 to 24.00
2 × 4-in. random	20.00 to .....
2 × 6-in, random	19.50 to 20.00
2 × 8-in.	21.50 to 22.00
2 × 10-in.	22.50 to 23.50
2 × 12-in.	22.50 to 23.50

Hemlock.—Prices are unchanged and delivered in New York, hemlock from Pennsylvania can be had at $20.50 to $21; from West Virginia, the quotation is $20 to $20.50.

The following prices are ruling in New York, and are 50 cts. lower than a month ago:

Price Per Thousand, f. o. b. cars, New York.

Size.	Length. 10 ft.	Length. 12 ft.	Length. 14 ft.	Length. 16 ft.
2 x 4-in.	$22.50	$20.50	$20.50	$22.50
2 × 6-in. to 2 × 10-in.	20.50	20.50	20.50	17.50 to 18.50
3 × 4-in. to 12 × 12-in.	21.00	21.00	21.50	18.50 to 19.50
1 × 8-in.	....	17.50	17.50	17.50
1 × 10-in. and 1 x 12-in.	....	18.00	18.00	18.00

Cross Ties.—The following prices quoted f. o. b. New York by G. S. Baxter Co., 15 William St., New York City, are unchanged from last month, as follows:

	Cents each.
7 × 9-in. by 8 ft. 6-in.	75
6 × 9-in. by 8 ft.....nominal	72
6 × 8-in. by 8 ft.	67

Second-class, sound and square edge, are quoted as follows:

	Cents each.
7 × 9-in. by 8 ft.	61
6 × 9-in. by 8 ft.....nominal	51
6 × 8-in. by 8 ft.....nominal	45

OILS AND PAINTS.

Petroleum Products.—The brightest part of the business seems to be in the export department. Some improvement in domestic business, however, has been noted.

The Standard Oil Co. quotes the prices of crude oil in bbls. at the wells as follows: Pennsylvania, Second Sand, and Tiona, $1.30; Mercer black, is 87 cts.; Corning, 77 cts.; New Castle, 84 cts.; Illinois, 65 cts.; Illinois heavy, below 30 gravity, 55 cts.; Kansas heavy 30 cts.

In the New York market petroleum from tank wagon is unchanged at 6 cts. per gallon.

Auto naphtha and stove gasoline have declined 1 ct. per gal. since last month and are now quoted at 12¾ cts.

Fuel oil is 2.75 cts. per gal. or $1.15 per bbl. of 42 gals. in carload lots, f. o. b. New York.

Spirits Turpentine.—The market is again lower, sales being made in New York at 53½ to 54 cts. per gal. for 5 bbl. lots. The decline is largely the result of the pressure of a new crop, which will probably be a large one. In Savannah, prices are also lower at 50 cts. per gal. with the receipts far in excess of shipments and large stocks in warehouses.

Linseed Oil.—The market continues quiet and limited to the actual needs of consumers. Paint manufacturers are holding off, waiting the result of the crop of flaxseed. It is expected that the crop will be materially larger than last year. The price of options, as well as spot flaxseed, has declined again during the month, flaxseed for October being obtainable at $1.95 per bus. in Duluth.

Linseed oil in 5 bbl. lots is quoted at 87 to 88 cts. for city raw, and 88 to 89 cts. for boiled oil.

Paints.—The demand is small and the large consumers are waiting for lower prices of linseed oil. Prices of white lead in oil are unchanged. For lots of 500 lbs. or over, in 250 to 500-lb. kegs, 7½ cts. per lb in 25 and 50 lb. kegs, 7¾ cts. is quoted. Red lead and litharge in bbls., half bbls. and 100-lb. kegs, is 8 cts. per lb.

Graphite paint is moving slowly. The best grades of graphite paint in linseed oil can be purchased at $1.40 per gal.

Hydrox preservative paint is 75 cts. per gal. in bbl. lots, New York City.

Colors in oil are quoted at the following prices per lb.: Lamp black, 12 to 14 cts.; Chinese blue, 36 to 46 cts.; Prussian blue, 32 to 36 cts.; Van Dyke brown, 11 to 14 cts.; Chrome green, 12 to 16 cts.; Raw or Burnt Sienna, 12 to 15 cts.; Raw or Burnt Umber, 11 to 14 cts

LINE CONSTRUCTION.

Aluminum Wire.—Some large electric installation are contemplated which will undoubtedly call for a large tonnage of aluminum wire. Prices are without change at 31 cts.

Poles.—Cedar pole are quoted as follows by the R. D. Dowie Pole Co., New York Block, Seattle, Wash. The price is f. o. b. loading point:

Length in feet.	Diameter at top. 8-in.	Diameter at top. 9-in.
30	$2.70	.....
35	3.15	$3.50
40	3.60	4.00
45	....	4.50
50	....	5.00
55	....	5.50
60	....	7.20
65	....	9.75
70	....	10.50
75	....	11.25
80	....	12.00

The prices of 30 and 35-ft. poles with a 7-in. top are 25 cts. higher. Otherwise chestnut poles, f. o. b. Mechanicsville, N. Y., are quoted by T. C. Luther of that place as follows:

Length in feet.	Price each. Diameter at top. 5-in.	Price each. Diameter at top. 6-in.	Price each. Diameter at top. 7-in.
25	$1.50	$2.00	$2.75
30	2.50	2.75	3.50
35	2.75	3.25	4.25
40	3.25	4.00	5.50
45	4.00	5.50	7.50
50	5.50	7.50	9.50

Fir Cross Arms.—Prices are unchanged, as follows:

Size, 3¼ × 4-in.	Price per arm in cts. Pacific Coast.	Price per arm in cts. Chicago.	Price per arm in cts. New York.
3 ft., 2-pin	8	13½	15½
4 ft., 2-pin	11	18¼	21
5 ft., 4-pin	16	26¼	28½
6 ft., 4 and 6-pin	20½	31¼	36
8 ft., 6 and 8-pin	28	42	48½
10 ft., 8, 10 & 12-pin	37	55¼	67½

Telegraph Wire.—For lots of fair size, the wire measured in Birmingham wire gage, the prices in cts., per lb., are as follows: "Extra Best Best," Nos. 6 to 9, 4¾ cts.; Nos. 10 and 11, 4½ cts.; No. 12, 4⅝ cts.; No. 14, 5¼ cts. "Best Best," Nos. 6 to 9, 3¼ cts.; Nos. 10 and 11, 3¾ cts.; No. 12, 3½ cts.; No. 14, 4 cts. Actual freight is allowed from Trenton, N. J., where it does not exceed 25 cts. per 100 lbs.

Insulators. — Prices are without change. Glass insulators in lots of more than 1,000 and less than 10,000 are sold at the following prices per 1,000: Double petticoat, 20 oz., $33; Western Union, $30.25; No. 2 cable, $53.90; No. 4 cable, $210; Muncie type, 7-in., $236.50; No. 3 triple petticoat, 4½-in., $90.75.

Copper Wire.—The volume of business transacted has shown an increase and there is no doubt that consumers have more confidence in the market. The low price of copper has stimulated consumption and given dealers more confidence. Prices are firm at 14 cts. base.

CHEMICALS.

	Cts. per lb.	
Nitric acid, 30°	3.87½	to 4.25
Nitric acid, 40°	4.50	to 4.87½
Sulphuric, 60°	0.90	to 1.00
Sulphuric, 66°	1.00	to 1.25
Sal Ammoniac, lump	9.25	to 9.75
do., granulated	5.87½	to 6.00
do., gray	6.00	to 6.25
Sulphur, roll	1.85	to 2.15
Sulphur, flour	2.00	to 2.40
Sulphur, flowers	2.20	to 2.60

	Per gallon.	
Alcohol, grain, U. S. proof	$2.58	to $2.60
Alcohol, denatured, 5-bbl. lots	.41	to .42
Alcohol, denatured, ½-bbl.	.46	to .47
Alcohol, wood, 95 to 97	.52	to .57
Alcohol, wood, purified	.80	to ...

METALS.

Copper.—Business transacted in copper during the last month was smaller than during the previous one, but prices held reasonably firm. In fact, during the first fortnight electrolytic sold at ⅛-ct. advance over the best price in June. Since then, however, prices have declined and electrolytic is now obtainable at 12.62½ cts. and lake at 12.75 cts. The stability of the copper market is largely due to the volume of exports. During July, these averaged approximately 1,000 tons daily, or about the same as during June. That this metal is going into consumption and is not being shipped abroad for financial reasons is stated by those well informed with the European situation and is well substantiated as industrial activity all through Europe is at flood tide. Official reports bearing on the situation also confirm this view, as for example: The British Board of Trade has recently figured the consumption of copper in the United Kingdom during the first half of this year at 59,000 tons, compared with 45,000 tons during the same period last year. At the same time, the stock of copper in London, Liverpool and Swansea amounted to 56,000 tons, compared with 88,000 tons at the same time last year.

The relief from the overproduction will come through European buying, and this buying has been steady for many months. That the stocks have not increased more is due to the excellent consumption. By many this is taken as an indication that no very low prices, comparatively speaking, may be expected in the next few months though, with stocks at such a low point, foreign consumers would buy freely.

The production of copper during July was not as large as in previous months, due to the excessive heat, but while it curtailed the production the same cause also curtailed production at the mills. Reports from the Butte district are to the effect that the costs of producing copper at some of the mines have been steadily reduced and now average below 10 cts. per lb. This is quite a factor against developing any new copper properties in the near future.

Roofing Copper.—The demand is good and an especially notable inquiry is being observed for copper firebox sheets. Copper roofing sheets are sold at 16½ to 17 cts. per lb. base.

Pig Tin.—The wild speculation of last month has passed away and prices of tin have returned to more sane levels. The trend of the market throughout the entire month has been toward lower prices, and, while they are still high, they have been cut nearly 10 cts. per lb. Compared with the latter part of 1908 and the early part of 1907, a period of about ten months, they do not seem unreasonable, for during that entire period prices ranged above 41 cts. per lb. The tin syndicate still has control of the situation but has sold a great deal of future tin and shipped much tin to America. The shipments to America have been a feature of the trade, amounting to practically 5,000 tons during the month of July. It has been noticed that the consumption has fallen off on account of these high prices and it would not be surprising if some industries in which tin has been used for a great many years would cease to use it altogether. The Banca sale the latter part of July released 2,500 tons, which did much toward improving the spot situation. Sales of tin have been made as low as 41 cts. and the prevailing price is now 41½ to 41¾ cts. For forward delivery, tin is practically the same price as for spot.

Miscellaneous Metals.—Small lots of metal and metal products can be obtained from jobbers' stores, New York, at the following prices:

	Per lb.
Bismuth	$2.25
Brass tubes, iron pipe sizes:	
½-in.	.19
¾ to 3-in.	.18
3½-in.	.19
4-in.	.20
Brass, sheets	.14¼
Brass, rods	.14¼
Solder, ½ and ½ guaranteed	.27½
Zinc, sheets	.08½
Manganese bronze rods	.16
Manganese bronze in crucible form	.14
Monel metal, ingot	.16

Old Metals.—Miscellaneous lots of scrap metal, amounting to about a ton, can be sold to dealers in New York at about the following prices:

	Cents.	
Copper, heavy & crucible	10.75	to 11.00
Copper, heavy and wire	10.50	to 10.75
Copper, light and bottoms	9.50	to 9.75
Brass, heavy	7.00	to 7.25
Brass, light	5.50	to 5.75
Heavy mach. composition	9.25	to 9.50
Clean brass turnings	7.00	to 7.25
Composition turnings	8.25	to 8.50
Lead, heavy	....	to 3.75
Lead, tea	....	to 3.50
Zinc, scrap	....	to 4.00

Spelter.—The market has moved up to the high figure reached in June and sales have been made at 5.80 cts., with spelter now quoted in New York at 5.70 to 5.80 cts. In St. Louis, it is even firmer, being quoted at 5.60 to 5.70 cts. The demand is steady and the spelter producers have the situation well in hand.

Lead.—The market shows an improvement and prices of lead have moved up. In St. Louis, spot lead is sold at 4.45 to 4.47½ cts. In New York, lead is steady at 4.50 to 4.55 cts., outside producers asking the higher price.

	Per lb.
Sheet Lead:	
Large lots	6.25 cts.
Small lots	6.75 cts.
Lead Pipe:	
Large lots	5.75 cts.
Small lots	6.40 cts.

MISCELLANEOUS.

Roofing Slate.—Some improvement in the volume of business compared with last year is noted, but there is no large trade being transacted. Quotations are named per "square" or 100 sq. ft. of roof surface in carload lots of the sizes in most general use, f. o. b. quarry station:

	Prices per 100 sq. ft.	
Vermont, sea green	$3.50	to $4.10
Pennsylvania, Bangor Ribbon	3.50	to 4.00
Maine, Brownsville No. 1	5.00	to 7.75
Maine, Brownsville No. 2	4.50	to 6.00
No. 1 Red	10.50	to 12.00
Unfading Green	4.00	to 5.50
Genuine Bangor	4.00	to 6.50
Pen Argyle	4.00	to 5.50

Rope.—Prices are without change but the market is steady.

Pure Manila is 8½ to 9 cts. per lb.; second grade, 7½ to 8 cts.; hardware grades, 7 to 7½ cts. per lb. Pure Sisal is 6½ cts. for the highest grades, and 6 cts. for less desirable grades. Jute rope in commercial sizes is 6 to 6½ cts per lb.

Waterproofing.—The prices for carload lots, f. o. b. cars New York, are as follows: Hydrex waterproofing felt, $1.25 per 100 sq. ft.; Hydrex compound "A," 26 cts. per gal.; Hydrex compound "B," 18 cts. per gallon.

Texaco waterproofing cement is $30 per ton in car lots, f. o. b. cars New York or Philadelphia.

Asphaltum for waterproofing is sold at $25 to $27 per net ton.

Glidden, graphite acid proof coating is sold at $1.25 per gal. in bbl. and ½ bbls., and $1.40 per gal. in 5-gal. cans. These prices are f. o. b. Cleveland or for delivery from warehouse, New York, Chicago, St. Louis, Boston or Atlanta.

Roofing Cement.—Prices are unchanged at $25 per ton for Texaco.

Explosives.—Dynamite of the kind usually used by contractors is approximately 11 to 13 cts. per lb., f. o. b. factory, in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20 to $1.40 per keg of 25 lbs. in lots of 10,000 lbs. The following prices prevail on Trojan in carload lots, minimum 24,000 lbs., f. o. b. Pacific Coast points: No. 1, 13½ cts.; No. 2, 10½ cts.; No. 3, 10 cts. They have a disruptive force equivalent to 60%, 40% and 30% of nitro-glycerine.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft., $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 20 ft., $9.40; 30 ft., $12; 36 ft., $14.60.

Caps in lots of 10,000 are $7 to $8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

Asbestos.—Asbestos building felt and sheathing in less than ton lots is 3½ cts. per lb. for the light, weighing from 6 to 30 lbs. per 100 sq. ft.; [illegible] cts. per lb. is charged for the heavy, weighing from 45 to 56 lbs. per 100 sq. ft.

Millboard is made in standard sheets, 40 × 40 ins., and 41 × 40 ins. It varies in thickness from 1/32 to [illegible] and in weight from 2 to 27 lbs. per sheet. The net price in 100-lb. lots is [illegible] per lb.

Transite, asbestos wood, [illegible] used for fireproofing, ventilators [illegible] smoke jacks, comes in standard sheets, 36 × 48 ins., 42 × 48 ins., and 42 [illegible] ins. The prices, f. o. b. factory, Na[illegible], N. H., are as follows:

Thickness.	Weight.	Price.
⅛-inch	1 lb.	$0.08
3/16-inch	1½ lbs.	.12
¼-inch	2 lbs.	.16
5/16-in.	2½ lbs.	.20
⅜-inch	3 lbs.	.28
7/16-inch	3½ lbs.	.28
½-inch	5 lbs.	.32
9/16-inch	4½ lbs.	.36
⅝-inch	5 lbs.	.40
¾-inch	6 lbs.	.44
⅞-inch	7 lbs.	.48
1-inch	8 lbs.	.52
1¼-inch	10 lbs.	.56
1½-inch	12 lbs.	.64
1¾-inch	16 lbs.	.72
2-inch	16 lbs.	.80

Paper.—Prices are slightly less firm than last month, as follows:

Tarred Paper:	Per roll of 108 sq. ft.	
Standard, 2-ply, 40 lbs.	$0.40	to $0.45
Extra heavy, 2-ply, 45 lbs.	.50	to .55
Standard, 3-ply, 60 lbs.	.60	to .65
Extra heavy, 3-ply, 70 lbs.	.70	to .75

Rosin, Sized Sheathing:	Per roll of 500 sq. ft.
Light, 25 lbs.	$0.38
Medium, 30 lbs.	.45
Heavy, 40 lbs.	.60

Rubber.—A decidedly firmer trend is observed in the rubber market and while the buying is not large prices move toward higher levels with ease. Consumers in the United States do not take much interest in the market, some of the largest plants making overshoes and boots have closed down for lack of orders but the makers of automobile tires are working to the limit of their capacity. The following range of quotations was established late in July: Up River Para, fine, $1.15 to $1.18; Up River, Para, coarse, 93 to 94 cts.; Caucho, ball, 91 to 92 cts.; Guayule, 44 to 46 cts. These represent an advance of 10 to 15 cts., compared with last month, except for Guayule, which is unchanged. African rubbers are unchanged at 92 to 96 cts., for Massai red; 75 to 76 cts. for Pinky; and 56 to 58 cts. for Niggers.

Lighterage Limits.—The free delivery or "Lighterage Limits" in New York City are as follows: in Manhattan, from a point opposite the Fort Lee ferry, south along the Hudson River around the Battery and north along the East and Harlem Rivers to the Jerome Ave. Bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City, points on the north and east shore at Staten Island, between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Eristina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Port Cove, Astoria, Long Island City.

MANUFACTURING PLANTS.

(Continued from page 55.)

✚**Detroit, Mich.**—Mildner & Eisen, 1018 Hammond Bldg., awarded the general contract to BRENT BROS., 2968 East Grand Blvd., for a 4-story and basement addition, 45 × 50 ft., and 1-story addition, 50 × 80 ft. for the Elkhard and Becker Brewing Co., 482 Orleans St. Cost is $35,000.

✚R. E. Raseman, 1302 Penobscot Bldg. has awarded the following contracts for the 3-story and basement factory, for the Cadillac Motor Car Co. Bldg., 60 × 390 ft., 1343 Cass Ave. Structural iron work to H. B. LEWIS, 45 Joseph Campau Ave. Masonry to A. A. ALBRECHT CO., 820 Penobscot Bldg. Carpentry, to JOHN WHITTACKER & CO., 51 Church St. Cost, $75,000.

G. A. Mueller, 804 Breitmeyer Bldg., has awarded the following contracts for a new 1-story and basement foundry, 65 × 150 ft. for the Peerless Crucible Steel Casting Co., Gibson and Alexandrine Sts. Structural iron work let to RUSSELL WHEEL & FOUNDRY CO., Chene St. and Belt Line R. R.; masonry let to LANNEN & LYNN, Builders Exchange; plumbing let to JOHN IRVINE, 173 Elmwood Ave. Cost $25,000.

✚Albert Kahn & E. Wilby, 800 Trussed Concrete Bldg., have awarded the contract to BRYANT & DETWILDER, 510 Hammond Bldg., for the 3-story factory addition 50 × 129 ft. for the Packard Motor Car Co. S. D. Waldon, Secy., E. Brand Blvd. and Belt Line R. R. Cost, $35,000.

✚O. G. Frederick, Prentis Apts., has awarded the general contract for a 1-story factory building, 43 × 150 ft., to GEORGE B. KADHART, 270 Lysander Ave. Cost, $22,000.

✚The Ford Motor Co., Highland Park, Mich., has awarded the general contract for a factory 865 × 74 ft., 4-story, to W. E. WOOD CONSTRUCTION CO., Ford Bldg., Detroit. Cost, $250,000.

✚C. Howard Crane, 1920 Ford Bldg., has awarded the general contract for a foundry addition for Caille Bros. Co., 2nd Ave. and Amsterdam St., to A. HIRSCH & SON, Detroit, Mich.

✚Geo. D. Mason, 80 Griswold St., has awarded the contract to M. E. RYAN & SON, Penobscot Bldg. for the 2-story factory addition for the Anderson Electric Car Co., Milwaukee Junction. Estimated cost, $50,000.

✚**Kalamazoo, Mich.**—D. J. Albertson, 305 West Main St., Kalamazoo, Mich., has awarded the general contract for the 2-story and basement factory for the Hawthorn Paper Co., of Kalamazoo, Mich., to FRANK FLAITZ, Kalamazoo, Mich. Masonry to A. WHITE, 421 W. Ransom St. Cost, $150,000.

Tecumseh, Mich.—Burrows & Wells, 701 Trussed Concrete Bldg., are preparing plans for a new 1 and 2-story factory for the Uncle Sam's Macaroni Co., P. W. A. Fitzsimmons, Mgr. Tecumseh, Mich. Owners will purchase material and sublet contracts. Cost, $40,000. Size of plant, 69 × 431 ft.

✚**Moline, Ill.**—It is reported that the contract has been awarded to H. W. HORST, of Rock Island, for the erection of a 1500 × 150 ft. addition to the foundry of Root & Vandervoort Engineering Co., in East Moline. The estimated cost is $25,000.

✚**Oshkosh, Wis.**—The Oshkosh Brewing Co. awarded contracts for the construction of its $75,000 brewing plant as follows: Excavating, concrete foundations and superstructure, C. R. MEYER & SON, Oshkosh; boilers, RELIANCE BOILER WORKS, Oshkosh; copper tanks, etc., GOETZ CO., Chicago; millwright work and installing machinery, OLSEN & TILDEN, Chicago; steel tubes and tanks, PFAUDLER CO., Rochester, N. Y.; icemaking and refrigerating machinery, YORK MANUFACTURING CO., Chicago. William Glatz, is Pres. and Arch.

Milwaukee, Wis.—The United States Cold Storage Co., 701 Pabst Bldg., has commissioned John Ahlschlager & Son, Archs., Chicago, to prepare plans for the proposed $500,000 cold storage plant and warehouse. It will be 400 × 140 ft. in size, with a power house and ice plant 120 × 42 ft. Work will begin about Aug. 15. A. P. Criswell is Pres. and G. C. Miller is Secy.

Leenhouts & Guthrie, Archs., have awarded following contracts on shop building for Chain Belt Co., 736 Park St.; mason work, STRACHOTA & SON; concrete, DAHLMANN CONST. CO.; carpentry, MADSON, CHRISTENSEN & INGBRETSON; steel and iron, WORDEN-ALLEN CO.; roofing, WINDING & GEZELSCHAP. Cost, $50,000.

Minneapolis, Minn.—A 9-stroy cold storage plant will be erected by the Booth Cold Storage Co. The estimated cost is $300,000.

Greenville, Tex.—C. M. Dollins and associates have organized a Farmers Electric Gin & Ice Co., which will build a large cotton gin and ice factory here.

Spokane, Wash.—L. N. Varney will build a large shirt factory in Spokane.

Spokane, Wash.—The Spokane Soda Bottling Works will erect a $30,000 bottling factory at Madison and Third Aves.

Los Angeles, Cal.—Plans are being prepared for several factory buildings for the Western Malt & Distilling Co. The estimated cost is $25,000.

MISCELLANEOUS CONTRACTS.

(***Denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news concerning canal and Irrigation projects, etc., will be found under Water Supply—Irrigation.

✚***Dredging.** — Boston, Mass. — The Board of Harbor and Land Commissioners, State House, Boston, received bids for dredging an anchorage basin about 300 ft. × 250 ft. and 6 ft. deep at ocean low water, in Weymouth, Fore River, at Houghs Neck in the City of Quincy, on July 21. The work to be done is the dredging of about 17,000 cu. yds. scow measurement, of material to make an anchorage basin near the inner end of the channel leading to the wharf of the Houghs Neck Steamboat Co. The bids follow: The Eastern Dredging Co., 247 Atlantic Ave., Boston, 33 cts. per cu. yd.; J. P. O'Riorden, 6 City Sq., Charlestown, Mass., 29¾ cts.; Bay State Dredging Co., Ltd., 247 Atlantic Ave., Boston, 28.9 cts. The contract was awarded on July 26 to the BAY STATE DREDGING CO., Ltd. Frank W. Hodgon is Ch. Engr. Bd.

Refrigerating Machinery. — Boston, Mass.—Bids will be received until Aug 7 by the Trustees of Boston State Hospital for refrigerators and refrigerating machinery at Psychopathic Hospital, Fenwood Road. Walter Channing is Chn. French & Hubbard, Albany Bldg., are the Engrs.

***Dredging.**—Newport, R. I.—A Correction.—Bids were received as follows on July 18 by Col. Frederic V. Abbot, Corps Engrs., U. S. A., for dredging in Pawtucket River, R. I.: (a) 145,770 cu yds. scow measurement; (b) 10 cu. yds. boulders; (c) totals: Eastern Dredging Co., 247 Atlantic Ave., Boston, Mass., (a) 22.4 cts., (b) $8, (c) $32,732. Charles M. Cole, Fall River, Mass., (a) 21 cts., (b) $10, (c) $30,712; J. S. Packard Dredging Co., Providence, R. I., (a) 19.9 cts., (b) $9.50, (c) $29,103. Incorrectly noted under Boston, Mass., on July 27 as dredging at Boston.

***Channel Work.**—Newport, R. I.—Bids were received as follows on July 25 by Col. Frederic V. Abbot, Corps Engrs., U. S. A., Newport, for removing obstructions in Woods Hole Channel, Mass.: (a) Section No. 1; (b) Section No. 2; (c) Section No. 3; (d) totals: Coastwise Dredging Co., Norfolk, Va., (a) $21,000, (b) $16,000, (c) $16,000, (d) $53,000; John R. Burke, Walloston, Mass. (a) $16,550, (b) $16,550, (c) $16,550, (d) $49,650.

Comfort Station.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., Aug. 10, for all labor and materials required for the erection and completion of a comfort station and shelter in the playground located at the northwest corner of Worth and Baxter Sts.

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Subway and Retaining Wall.—New York, N. Y.—Bids will be received by Arthur J. O'Keefe, Comr. of Bridges, until 2 p. m., Aug. 10, for constructing the westerly subway and the Bayard St. retaining wall on the Manhattan Plaza of the Manhattan Bridge.

Sand.—New York, N. Y.—Bids will be received until 3 p. m., Aug. 10, by the Park Board, Dept. of Parks, for furnishing and delivering 2,500 cu. yds. of cow bay sand.

Air Compressor.—New York, N. Y.—Bids will be received by Arthur J. O'Keefe, Comr. of Bridges, until 2 p. m., Aug. 10, for furnishing and erecting one duplex, 2-stage, motor-driven air compressor at the Williamsburgh Bridge, Boro. Brooklyn.

+*Subways.—New York, N. Y.—A contracts have been awarded as follows by the Public Service Commission for the construction of the following sections of the Tri-Borough Subway system: Section 6, from East 26th St. to East 40th St., to the BRADLEY CONTRACTING CO., at $3,634,213; Section 7, from East 40th St. to East 53d St., to CHAS. H. PECKWORTH, at $2,750,463; Section 8, from East 53d St. to East 67th St., to the BRADLEY CONTRACTING CO., at $3,369,484; Section 10, from East 79th St. to East 93d St., to the BRADLEY CONTRACTING CO., at $3,253,073; Section 11, from East 93d St. to East 106th St., to the BRADLEY CONTRACTING CO., at $3,132,195; Section 5, to METROPOLITAN CONTRACTING CO., at $2,419,127; Section 12, to OSCAR DANIELS CO., at $2,825,741. All of the above sections are included in Route 5, Lexington Ave. Bids were opened on Oct. 27, 1910. Itemized bids were noted on Nov. 3 under Contract prices. These contracts have been awarded on a subway of smaller cross sections than for which bids were taken.

Fire Alarm System Extension.—New York, N. Y.—Bids will be received by Joseph Johnson, Fire Comr., until 10.30 a. m., Aug. 8, for furnishing all the labor and materials required for establishing and equipping an extension of the underground fire alarm telegraph system in the Borough of Queens.

Dredging.—New York, N. Y.—Bids will be received until 11 a. m., Aug. 26, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for dredging and removal of about 125,000 cu. yds., Cob Dock, Navy Yard, New York. R. C. Hollyday is Ch. of Bureau, Washington.

Storehouses and Stable.—New York, N. Y.—Bids will be received until 2 p. m., Aug. 9, by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, for furnishing, constructing and erecting storehouses and stable at East 24th St., near Ave. A, Boro. Manhattan.

Dock and Bulkhead.—Ossining, N. Y.—Bids will be received until Aug. 10 for furnishing and constructing at Ossining a dock and bulkhead, saddle piling, by Sillery, Sillery & Nordone, Water St. and Secore Road. Plans and specifications may be seen at the office of the above, Water St. and Secore Road.

Removing Piers.—Philadelphia, Pa.—Bids will be received by Joseph F. Hasskari, Acting Dir. Dept. Wharves, Docks and Ferries, until noon, Aug. 3, for the removal of old piers and obstructions from the site to be occupied by the proposed new pier and bulkhead at Dock St., Delaware River.

+Concrete Work.—Cumberland, Md.—The city has awarded a contract to the VANG CONSTRUCTION CO., of Cumberland, at $18,920, for concrete covering of a mill race which runs through the center of the city.

+Motor Trucks.—Washington, D. C.—The contract for furnishing eight 5,000-lb. and four 10,000-lb. electric motor trucks has been awarded by the Bureau of Yards and Docks, Navy Department, Washington, to the GENERAL VEHICLE CO., Long Island City (L. I.), N. Y., at $49,000. Noted on July 6.

*Dredging.—Richmond, Va.—Bids are asked by Charles E. Bolling, City Engr., until noon, Sept. 5, for dredging along the left shore of James River to Nicholson St. For details, see advertisement in this issue.

Concrete Walls.—Wheeling, W. Va.—Bids will be received until 10 a. m., Aug. 14, by the County Commissioners of Ohio County for constructing two concrete walls, one on Caldwells Run, and one on the G. C. & P. A. S. Bell is County Engr., Wheeling.

Dredges, Snag Boat.—Charleston, S. C.—Bids will be received until noon, Sept. 5 by Maj. G. P. Powell, Corps Engrs., U. S. A., Charleston, for constructing and delivering, complete, the two steel hull, stern-wheel, combination bucket dredges and snag boats. Pedee and Wateree.

Stone.—Savannah, Ga.—The only bid received on July 26 by Col. Dan C. Kingman, Corps Engrs., U. S. A., Savannah, for furnishing and placing stone for raising the low places in jetties at Cumberland Sound, Ga. and Fla., was that of George W. Parkhill, Jacksonville, Fla., at $3.43 per ton; $34,300. The bid was recommended for acceptance.

+Dredging.—Jacksonville, Fla.—The contract has been awarded to BOWERS SOUTHERN DREDGING CO., of Galveston, Tex., by the U. S. Government for dredging in St. Johns River, at $570,564.

Weather Station.—Key West, Fla.—The contract for the construction of a 2-story building for the Weather Bureau here, has been awarded to RILEY BROS, of Key West, at $14,479. Bids were opened on July 18. List of bidders noted on July 20.

+Seawall.—St. Petersburg, Fla.—The City Council has awarded the contract to W. B. WILLIAMS for constructing about 1,200 ft. of concrete seawall at $5.83 per lin. ft.

Drainage Canal—Merigold, Miss.—All bids were rejected on July 23 by Bobo & Brannon, Consult. Engrs., Clarksdale, Miss., for excavating a drainage canal, about 2½ miles long for the Sunflower Plantations at Merigold. The work involves about 35,000 cu. yds. of excavation. New bids will be asked.

Earthwork.—Vicksburg, Miss.—Bids will be received until 11 a. m., Aug. 18, by Capt. J. A. Woodruff, Corps Engrs., U. S. A., Vicksburg, for constructing about 960,000 cu. yds. of earthwork in the Third district.

+Ditch.—Crowley, La.—A contract has been awarded to JOHN McMANN, of Goshen, Ind., for digging a 40-mile ditch near here, at $80,000.

Levee.—New Orleans, La.—Bids will be received until Aug. 1[illegible] by the Orleans Levee Board for constructing the levee between Montegut and Louisa Sts., about 55,000 cu. yds. S. F. Lewis is Ch. Engr. Bd.

Levee.—Columbus, Ohio.—Bids will be received by the State Board of Public Works until noon, Aug. 8, for building the Umbenhauer Levee, about three miles southwest of the town of Franklin, in Warren County, on the north side of the Middletown Dam also for building a concrete wasteway as a part of said levee. J. I. Miller is Ch. Engr., Columbia.

Levee.—Columbus, Ohio.—Bids will be received until Aug. 15 by H. S. Holton, Dir. Pub. Ser., for the construction of a levee on the east side of the Scioto River, south to Moler St.

Ditch Improvement.—Fostoria, Ohio.—The County Commissioners on July 24 authorized an issue of $10,000 of bonds for the construction of the Silver Creek ditch improvement.

Street Signs.—Columbus, Ohio.—Bids will be received by H. S. Holton, Dir. Pub. Ser., until Aug. 15 for furnishing street signs for the city of Columbus. The specifications on file at the office of Henry Maetzel, City Engr.

Fill.—Dayton, Ohio.—Bids will be received until Aug. 5 by the County Commissioners, Dayton, for constructing a fill on the River Road and Essex Ave., Harrison Township, for the protection of the new River Road and the railroad crossing. W. H. Aszling is County Clk.

*Harbor Work.—Michigan City, Ind.—Bids will be received until 10 a. m., Aug. 29, by Lt. Col. George A. Zinn, Corps Engrs., U. S. A., Chicago, Ill., for timber superstructure and pile protection in harbor at Michigan City.

Tile, Ditch.—Paxton, Ill.—Bids will be received until 1 p. m., Aug. 4, by the Commissioners of the Big Four Drainage District of Ford County, Ill., at Paxton, for furnishing of 875 ft. of 15-in. tile and 50 ft. of 18-in. tile; also for hauling, trenching, laying constructing retaining wall, constructing 400 ft. of open ditch, etc. Bids must be delivered to E. H. Fagersburg or R. C. Park, Paxton.

Drain Work.—Pleasant View, Ill.—Bids will be received until 10 a. m., Aug. 5, by the Drainage Commissioners of Drainage District No. 3, Pleasant View, for furnishing, hauling, laying and refilling the following drains: 1,716 ft. 22-in. cut 3.6 ft.; 1,785 ft. 18-in. cut 4.5 ft.; 1,650 ft. 16-in. cut 4.4 ft.; 924 ft. 15-in. cut 5.2 ft.; 3,135 ft. 14-in. cut 4.6 ft.; 900 ft. 12-in. cut 5.0 ft.; 1,790 ft. 10-in. cut 4.6 ft.; 66 ft. 8-in. cut 4.8 ft.; 625 ft. 7-in. cut 4.3 ft.; tile to be furnished f. o. b. Blue Mound, Ill; hauling to consist of unloading from cars and distributing on lines of work; trenching and laying including refilling trenches, to be by the rod in length and foot in depth; furnishing and hauling to be by the foot. The cut noted above is average cut.

Ditch.—Clarion, Iowa.—E. M. Callender, County Audr., will receive bids until 2 p. m., Aug. 8, for the construction of Ditch No. 55 approximating 86,627 yds. of excavation. George L. Mechem is Engr.

Drainage.—Council Bluffs, Iowa.—Bids will be received until Aug. 22 by the Board of Supervisors, at Council Bluffs, for constructing two laterals for the Pigeon Creek drainage ditch.

+Ditch Work.—Rockwell City, Iowa.—J. PHELPS, of Boxholm, Iowa, has been awarded the contract for cleaning, deepening and widening Drainage Ditch No. 6. Bids were opened on July 12 by C. O. Dixon, County Audr., Rockwell City. Estimated cost, $14,820.

*Tug.—Duluth, Minn.—Bids will be received until noon, Aug. 28, by Maj. Francis R. Shunk, Corps Engrs., U. S. A., for the construction of the wooden, screw, gasoline tug Patrol.

Culvert Pipe.—Omaha, Neb.—Bids will be received by D. M. Haverly, County Clk., until Aug. 5 for furnishing culvert pipe for the next twelve months to the county.

River Improvements.—Fort Benton, Mont.—Brig. Gen. W. H. Bixby, Ch. Engr. Corps Engrs., U. S. A., Washington, D. C., it is reported, has recommended the expenditure annually of from $75,000 to $150,000 for the improvement of the Missouri River, from Fort Benton to Sioux City, Iowa, 1,474 miles.

Drainage Work.—Clinton, Mo.—Brooks & Jacoby, Engrs., Shukert Bldg., Kansas City, Mo., will receive bids until Aug. 15, it is reported, for drainage work in Big Creek Drainage District No. 1, Henry and Johnson Counties, the work to consist of six to 13 miles total length 12-ft. base, ¾-in. to 1-in. slope, 17 ftd depth, floating dredge work, various public and private bridges. Estimated cost, $100,000.

Revetment Wall.—St. Louis, Mo.—The Board of Public Improvements, William T. Findly, Secy., St. Louis, is asking for bids for the proposed 9,000-ft. revetment wall to protect the Chain of Rocks from the Mississippi River. Estimated cost, $150,000.

Brick Dwelling.—Hot Springs, Ark.—Bids will be received until 2 p. m., Sept. 15, by the Department of The Interior, Washington, D. C., for the construction, complete, of a brick dwelling on the south side of Hot Springs Mount Reservation, Hot Springs. Carmi A. Thompson is Asst. Secy., Washington.

+Storage Tanks.—Galveston, Tex.—The Magnolia Oil Co. is preparing to erect four storage tanks here, each of 15,000 gallons capacity, and also a distributing station. M. C. BOWDEN has the contract.

Drainage.—Brownsville, Tex.—Bids will be received until Aug. 29 at the office of A. W. Amther, Drainage Engr., by Geo. M. Smith, Chn. Bd. Drainage Comrs. of Drainage District No. 1, for constructing drainage ditches, etc., about 40 miles, with an aggregate yardage of about 1,000,000 cu. yds.

Ore Docks.—Port Bolivar, Tex.—The Atchison, Topeka & Santa Fe Ry. Co. is considering the construction of ore docks at Port Bolivar, of concrete. Estimated cost, about $35,000. C. A. Morse is Ch. Engr., Topeka, Kan.

Railroad Work.—Benson, Ariz.—See item under Railways: Texas, El Paso & Southwestern R. R.

+Drainage Canal, etc.—Goldendale, Wash.—BERDLESON & SON, of Tacoma, Wash., have been awarded the contract by the County for the construction of a main canal and laterals for a system of drainage for Drainage District No. 1 of Klickitat County, Wash. The contract includes about 200,000 cu. yds. of excavation.

Dredging.—Seattle, Wash.—Bids were received as follows on July 26 by the U. S. Engineer, Seattle, for dredging Willapa River: International Contract Co., Seattle, $234,199; Puget Sound Bridge & Dredging Co., Central Bldg., Seattle, $157,167; Tweeden & Jones, $171,104; Standard American Dredging Co., $189,617.

Dredge.—Portland, Ore.—Bids for constructing the steel sea-going suction dredge "Col. P. S. Michie" will be received by Maj. J. J. Morrow, Corps Engrs., U. S. A., Couch Bldg., Portland, until noon, Sept. 6.

+Oil Plant for Dredge.—Portland, Ore.—The U. S. Engineer, Portland, on July 19, awarded the contract to THOMAS J. SHEA for equipping the dredge "Clatsop" with an oil-burning plant, at $15,100.

+Steamship. — Lonbeach, Cal.—The CRAIG SHIPBUILDING WORKS, of Longbeach, has secured a contract to construct a large steel steamship for the Western Steam Navigation Co., at $300,000. All parts of the vessel, except unfinished steel plates, will be manufactured at the plant here.

Dredging.—Los Angeles, Cal.—Bids have been received as follows by the Board of Public Works of Los Angeles for dredging 1,200,000 cu. yds. of material from the inner harbor at Wilmington: Standard American Dredging Co., (1) to complete in 17 months, 19½ cts. per cu. yd.; (2) in twelve months, 20½ cts.; (3) in nine months, 21½ cts.; American Dredging Co., (1) 22¼ cts., (2) 22¾ cts., (3) 23¼ cts.; Pacific Wharf & Storage Co., (1) 30 cts., (2) and (3) no bids; San Francisco Bridge Co., (1) no bid, (2) 23 cts., (3) no bid.

Waterfront Improvements.—Martinez, Cal.—The citizens have voted to issue $35,000 of bonds for the erection of a municipal wharf and improvements to the waterfront.

Park. — Riverdale, Cal. — Olmsted Bros., Brookline, Mass., Landscape Engrs., have been commissioned to prepare plans for a park to be constructed here. Estimated cost, $30,000.

Fire Hydrants and Engine.—Riverside, Cal.—The City Council will ask for bids for 100 additional fire hydrants, and for an automobile fire engine.

Melting Cupola.—Vallejo, Cal.—Bids will be received until Aug. 29 by the Paymaster General, U. S. N., for Schedule No. 3780, for furnishing and installing an iron melting cupola at the navy yard, Mare Island, Vallejo, Cal., of the following general dimensions: Capacity, nine to ten tons per hour; inside diameter of shell, five feet six inches; diameter of air chamber, seven feet extreme height; base plate to top of stack, 65 ft.; height, base plate to top of columns, four feet; height, top of column to charging door, 15 ft.; diameter, inside lining at tuyeres, four feet; thickness of lining below charging door, nine feet; thickness of lining above charging door, 4½ ins.; thickness of plate in shell below charging door, ¼-in.; thickness of plate in stack above charging door, ¼ to 3/16-in.; thickness of plate in air chamber, .134-in.

Rink.—Toronto, Ont.—The Board of Control on July 18 approved plans for the new arena and artificial ice rink, which is to replace the old Mutual St. rink, subject to the approval of the Fire and Light Commission. The arena will occupy a space 334 × 190 ft., and will have a seating capacity for over 6,000 people. The ice surface will be 200 × 90 ft. Estimated cost, about $200,000.

+Subway.—Toronto, Ont.—The contract for concrete abutments in connection with the Jane St. subway in West Toronto, has been awarded by the Canadian Pacific Ry. Co. to WELLS & GRAY, LTD., of Toronto. A. L. Hertzberg, is Division Engr., Toronto.

Dock Extension.—Brockville, Ont.—Bids will be received until 4 p. m., Aug. 21, by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for extension to Tunnel Bay Dock, Brockville.

Houses.—Ottawa, Ont.—Bids will be received until noon, Aug. 21, by P. E. Ryan, Secy., Transcontinental Ry., Ottawa, for the construction of trainmen's houses on the Transcontinental Ry. at various points.

Pier and Sheds.—Halifax, N. S.—The time for receiving bids for pier and sheds here has been extended to noon, Aug. 10. L. K. Jones is Secy., Dept. Rys. and Canals, Ottawa, Ont.

For other Proposal Advertisements see pages

57, 58, 59, 60, 61, 62, 64

of Advertisements and Construction News, page 62

BRIDGE.

OFFICE BOARD OF PUBLIC WORKS.
Grand Rapids, Mich., July 31, 1911.

Sealed proposals will be received at the office of the Board until Aug. 24, 1911 at 8.00 p. m., for the construction of a reinforced concrete bridge and approaches thereto, to be known as the Leonard Street Bridge across Grand River according to the plans and specifications on file at the office of the Board. Proposals not made in duplicate will be rejected. The Board reserves the right to reject any or all bids.

Each bidder shall deposit with his proposal a certified check or certificate of deposit payable to the order of E. H. Christ, President, in the sum of 5 per cent. of his proposal but not less than $50.00, to be forfeited to the City of Grand Rapids in case he shall fail to enter into contract, in accordance with his proposal, should his proposal be accepted by the Board of Public Works.

All proposals must be made upon blanks that will be furnished upon application at the office of the Board. By order of the Board.

E. H. CHRIST,
President.

Attest:
SAMUEL A. FRESHNEY,
Secretary and General Manager.

SEWER CONSTRUCTION.

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY.
Incorporated.

Sealed proposals for the construction of the "Alta Avenue Sewer," Contract No. 84, will be received at the office of the Commissioner of Sewerage, No. 605 Equitable Building, Louisville, Ky., until 12 o'clock noon, August 18.

The work consists mainly of the construction of 4,220 feet of 10" sewer and 24 in. to 45 in. storm water drain, depth of cut 8 feet to 18 feet, including about 800 cubic yards of concrete and 4,220 feet of 10 in. pipe.

Sealed bids should be endorsed "Proposal for the Alta Avenue Sewer" and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by certified check for at least Seven Per Cent. (7%) of the amount of the bid, or a "Bidder's Bond," as described in the form of proposal.

Plans and specifications may be seen at the office of the Commissioners of Sewerage.

P. L. ATHERTON,
Chairman.
CHAS. P. WEAVER, Secy.-Treas.
J. B. F. BREED, Chief Engineer.

U. S. ENGINEER OFFICE, Duluth, Minn., July 28, 1911.—Sealed proposals for construction of the wooden, screw, gasoline tug PATROL will be received at this office until 12 M., Aug. 28, 1911, and then publicly opened. Information on application. FRANCIS R. SHUNK, Maj., Engrs.

SUPERSTRUCTURE, BRIDGE AT WASHINGTON STREET.

DEPARTMENT OF PUBLIC WORKS.

Chicago, July 28, 1911.

Sealed proposals will be received by the City of Chicago until 11 a. m., Saturday, Aug. 12, 1911, at room 406 City Hall, for furnishing, delivering and building in place all temporary work, and for furnishing all materials, tools, labor and all appliances and appurtenances required in the performance of all necessary operations for the complete construction and erection of the superstructure of a Bascule Bridge over the south branch of the Chicago River at Washington street, including all necessary machinery thereto, according to plans and specifications on file in the office of the Department of Public Works of said city, room 406 City Hall.

Proposals must be made out upon blanks furnished at said office, and be addressed to said department, indorsed "Proposals for Superstructure. Washington Street Bridge," and be accompanied with $3,000 in money or a certified check for the same amount on some responsible bank located and doing business in the City of Chicago, and made payable to the order of the Commissioner of Public Works.

The Commissioner of Public Works reserves the right to reject any or all bids.

A deposit of $25.00 will be required to insure the safe return of the plans and specifications.

No proposal will be considered unless the party offering it shall furnish evidence satisfactory to the Commissioner of Public Works of his ability, and that he has the necessary facilities, together with sufficient pecuniary resources, to fulfill the conditions of the contract and specifications, provided such contract should be awarded to him.

Companies or firms bidding will give the individual names, as well as the name of the firm, with their address.

L. E. McGANN,
Commissioner of Public Works.

WATER WORKS SYSTEM.

Dorris, Cal.

Notice is hereby given that the Town of Dorris, County of Siskiyou, State of California, will receive sealed proposals to build the Dorris water-works system, up to the hour of 8 o'clock, p. m., on the 25th day of August, 1911.

Said bids to be filed with the Town Clerk, Fred. Chapman, accompanied with a certified check in a sum equal to 5% of the amount bid as a guarantee that the successful bidder will enter into a Contract to build said Water-Works System, according to the plans and specifications now on file in the Clerk's office of the Town of Dorris. Said bids to be submitted in the manner following, to wit:

1.—To build the System complete with machinery for Gasoline Power.

2.—To build the System complete with machinery for Electric Power. (Power to be furnished by the Siskiyou Light and Power Co.)

The above propositions do not include the digging and construction of the well for which there must be a separate bid.

The successful bidder will be required to enter into a Contract within five days after receiving notification if awarded the contract of building the said System. The successful bidder will be further required to complete the System within sixty days from the time of signing the Contract, except for good cause shown the Board of Trustees may extend the time. Copies of Plans and Specifications of said Water-Works System may be had by applying to the Town Clerk at a cost of $5.00. Board reserves the right to reject any and all bids.

R. L. OLIVER,
Chairman Pro Tem Board of Trustees,
Town of Dorris.

Attest:
FRED. CHAPMAN,
Clerk, Town of Dorris.

PUMPING MACHINERY.

MUSKOGEE, OKLAHOMA, PUBLIC IMPROVEMENTS.

Sealed proposals will be received by the City Council of the City of Muskogee, Oklahoma, until Tuesday, August 29, 1911, at 10 o'clock, a. m., and opened immediately thereafter, for the furnishing and erecting of the following pumping machinery:

1 6,000,000 low lift centrifugal pump,
1 6,000,000 high lift centrifugal pump,
1 3,000,000 high lift centrifugal pump.

Bids will be received alternatively for direct connection with electric motors and steam turbans.

A certified check for 10% of the amount of the proposal shall accompany each bid. The right is reserved to reject any or all bids, or to accept that one which, in the judgment of the City Council, is for the best interest of the City.

Specifications can be procured at the office of the City Engineer or at the office of the Consulting Engineer, 114 Liberty St., New York, on or after Aug. 10, 1911. File all bids with Charles Wheeler, Jr., City Clerk.

By order of the City Council.

E. H. FLEMING,
Commissioner.

T. P. CLONTS,
City Engineer,
ALEXANDER POTTER,
Consulting Engineer.

PAVEMENT.

RURAL MUNICIPALITY OF ST. VITAL.

Sealed and marked tenders addressed to the undersigned for a bituminous pavement, will be received at the Municipal Office, St. Vital, until the hour of 8 p. m., on Monday, the 14th day of August, 1911, for the following road:

Pembina Highway, 20 feet in widtn, with two curbs, approximate length, 3½ miles. Specifications, forms of tender and information may be obtained at the office of the Municipal Engineer, Mr. D. R. Baribeault, 807 Builders Exchange, Winnipeg. All tenders to be accompanied by a marked check for 5 per cent. of the amount of the tender.

The lowest or any tender not necessarily accepted.

BY ORDER,
E. A. POULAIN,
Secretary-Treasurer,
Riel P. O. Man.

GRAVEL ROAD.

Camden, N. J.

Bids are invited for building a gravel road from Gibbsboro to Berlin a distance of 2.92 miles in accordance with the plans and specifications on file in the office of the State Commissioner of Public Roads at Trenton, N. J., also at the office of the Clerk of the Board of Freeholders at Camden, N. J.

Estimate of Quantities.

8006	cu. yds. of compact gravel.
1000	ft. of underdraining.
12194	cu. yds. of excavation.
533⅓	sq. yds. more or less vitrified block gutters.

A certified check in the sum of $1,000 to accompany each bid. The Board reserves the right to reject any or all bids and decide as to the responsibility of bidders. Bids will be received immediately opened and publicly read at the Court House in Camden, on Wednesday, August 16, 1911, at 10.30 a. m.

JOHN PRENTICE,
Director.

J. J. ALBERTSON,
County Engineer.

July 31, 1911.

PAVEMENT.

Hillsdale, Mich.

Sealed proposals will be received up to noon of Aug. 16, for the construction of about 10,500 sq. yds. of brick pavement in this city. Plans and specifications can be seen at the office of the City Clerk or will be sent upon application.

C. L. HERRON,
City Engineer.

DREDGING.

Richmond, Va., Aug. 1, 1911.

Sealed proposals will be received at this office until 12 M. Tuesday, September 5, 1911 for doing certain dredging along the left shore of James River to Nicholson Street.

Full information may be obtained upon application at this office.

A certified check for $250.00 made payable to the Treasurer of the City of Richmond must accompany each bid as a guaranty of execution of contract.

The Committee on Improvement of James River reserves the right to reject any and all proposals offered.

CHAS. E. BOLLING,
Chief Engineer.

PAVEMENT.

RURAL MUNICIPALITY OF ST. VITAL.

Sealed and marked tenders, addressed to the undersigned, for a bituminous pavement, will be received at the Municipal Office, St. Vital, until the hour of 8 p. m., on Monday, the 14th day of August 1911, for the following road:

St. Mary's Road, eighteen feet in width, with one curb, approximate length, one mile. Specifications, forms of tenders, and information, may be obtained at the office of the Municipal Engineer, Mr. G. Mullon, 372 St. Jean Baptiste Street, St. Boniface, Man. All tenders to be accompanied by a marked check for 5 per cent. of the amount of tender.

The lowest or any tender not necessarily accepted.

BY ORDER,
E. A. POULAIN,
Secretary-Treasurer,
Riel P. O., Man.

WATER-PIPE.

Village of Irvington, N. Y.

Sealed bids will be received by the Board of Water Commissioners of the Village of Irvington, at the office of the Board, in the Town Hall, Main Street, Irvington, N. Y., until August 15, 1911, at 3.30 o'clock p. m., at which time they will be publicly opened, for the furnishing and laying of about 12,000 feet of 12-inch cast-iron water-pipe, making connections and doing other work in accordance with plans and specifications relating thereto, as adopted and filed in the above office with the Clerk.

Bids must be made upon the blank form attached to the specifications, and each bid must be accompanied by the sum of Five Hundred ($500) Dollars, either in cash or a certified check, payable to the order of the Treasurer of the Board of Water Commissioners, as a guaranty that the bidder will enter into the proposed contract if awarded to him, within 5 days after notice. Specifications can be obtained from the Clerk.

All proposals must be addressed to the Board of Water Commissioners of the Village of Irvington, N. Y.

The right is reserved to reject any or all bids.

Dated July 25, 1911.

JAMES G. ORTON,
Clerk.

PAVING, ETC.

Sayre, Pa.

Sealed proposals will be received by H. H. Mercereau, Boro. Clerk, Sayre, Pa., until 7 p. m., August 7, 1911, for approximately 8,000 sq. yds. of vitrified brick paving, 1,800 cu. yds. of excavation and 4,000 lin. ft. of combined concrete curb and gutter. Certified check of $500.00 payable to Borough Treasurer. Specifications and plans can be obtained of the Boro. Clerk.

H H. MERCEREAU,
Boro. Clerk.

Sayre, Pa., July 28, 1911.

PUMPING AND STORAGE PLANT, 655 Congress St., Portland, Me., July 25, 1911.—Sealed proposals in triplicate, will be received here until 11 a. m., Aug. 15, 1911, and then publicly opened, for construction of pumphouse, well shelters, concrete reservoir and tank; installation of pumping machinery, piping, etc., at Fort Levett, Me. Plans and specifications may be obtained by depositing $5.00 to guarantee their return. Information furnished upon request. U. S. reserves right to reject or accept any or all proposals, or any part thereof. Envelopes containing proposals should be indorsed: "Proposals for pumping and storage plant" and addressed to Constructing Quartermaster.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 28, 1911.—Sealed proposals will be received at this office until 3 o'clock p. m., on the 25th day of August, 1911, and then opened, for the installation of a conduit and wiring system for light and power and conduits for standard clock, telephone, bell, vault protection, fire alarm and telegraph systems in the New U. S. Post Office at New York, N. Y., in accordance with drawings and specification, copies of which may be had at this office, or at the office of the architects, Messrs. McKim, Mead and White, 160 Fifth Avenue, New York, N. Y., at the discretion of the Supervising Architect.

Applications must be accompanied by a certified check for $100 which will be held at this office until the return of the drawings and specifications. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., July 25, 1911.—Sealed proposals will be received in this office until 3 o'clock p. m., on the 5th day of September, 1911 and then opened for the enlargement and completion (including plumbing, gas piping, heating apparatus, and electric conduits and wiring) of the United States Office at Gadsden, Alabama, in accordance with drawings and specification, copies of which may be obtained from the Custodian of the building at Gadsden, Ala., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

U. S. ENGINEER OFFICE, 815 Witherspoon Building, Philadelphia, Pa., Aug. 1, 1911.—Sealed proposals for dredging in Delaware River, near Mud Island, Pa., and Burlington, N. J., will be received here until 12 noon, Aug. 31, 1911, and then publicly opened. Information on application. HERBERT DEAKYNE, Major, Engrs.

U. S. ENGINEER OFFICE, 815 Witherspoon Building, Philadelphia, Pa., July 31, 1911.—Sealed proposals for constructing four dikes in Delaware River, below Philadelphia, will be received here until 12 noon, August 30, 1911, and then publicly opened. Information on application. HERBERT DEAKYNE, Major, Engrs.

For Additional
PROPOSAL
Advertisements
See page 61

Situations Open

(Or Vacant)

SHOP superintendent or general superintendent for structural shop within 300 miles of New York, capacity about 20,000 tons annually for bridge, structural, conveyor and general work. Active, energetic man, experienced in similar work, only need apply. Give references in detail, salary expected, and when able to report in first letter. Address "G. A. 3," Engineering News, New York. 5-1t

WANTED—Supt. for plate and riveted steel pipe shop, one familiar with efficiency system preferred. Address "A. C. 5," Engineering News, New York. 5-tf

WANTED—Foreman for plate and riveted steel pipe shop, one familiar with efficiency system preferred. Address "B. C. 5," Engineering News, New York. 5-tf

SOLICITOR and outside man for engineering concern established 25 years; engineer with acquaintance among engineers, architects and contractors preferred; good fixed salary which can be increased in proportion to business secured; state education, experience and reference. Address "C. C. 5," Engineering News, New York. 5-1t

For Sale

CABLEWAY

For Sale

Four hundred foot span, N. Y. Cableway and Engineering Company's cableway, main cable 1⅞" diameter, two H.P. A-frame towers about 50 ft. high, Engine 30 H.P. 8 x 10 double cylinder, triple friction drum, reversible link motion and extra drum, with 50 H.P. boiler; anchor connections, hoisting ropes, traverse ropes, 3½ ton carriage, fall rope carriers, every part complete, with ¾ yard Hayward O. P. bucket; all of the above used by us only four months. Will sell cheap for cash. Address P. O. Box 3712, Boston, Mass. 5-2t

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FOR SALE.

Boilers

4-250 H.P. Heine Safety Water Tube Boilers, with smokeless down draft furnaces, together with connections, valves, etc., 65 ft. of 12" header flanged; 1-1,200 H.P. Webster Heater, All in first class condition. John V. Boland Const. Co., Chemical Bldg., St. Louis. 5-1t

FOR SALE

Contractor's Plant

One-third yard Smith mixer, with engine, on skids, used on one job, good as new; 6 H. P. steam engine; electric drill, Kuppel cars, etc., at 50 per cent. of cost. 1957 People's Gas Bldg., Chicago. Tel. Cent. 6166. 5-2t